

April 27, 2007

Ms. Diana Mason – Petroleum Technician State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 P. O. Box 145801 Salt Lake City, Utah 84114-5801

Directional Drilling R649-3-11

Lake Canyon Area #16-28-46 DLB Well

Surface: 1834' FSL & 344' FEL - NESE, 28-T4S-R6W Bottom Hole: 660' FSL & 660' FEL - SESE, 28-T4S-R6W

Duchesne County, Utah

Dear Ms. Mason:

Re:

RECEIVED

APR 3 0 2007

DIV. OF OIL, GAS & MINING

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill ("APD") regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-11, pertaining to Directional Drilling and the Location and Siting of Wells.

- The above-mentioned proposed location is within our Lake Canyon Area.
- BBC is permitting this well as a directional well in order to minimize surface disturbance. By locating the well at the surface location and directionally drilling from this location, BBC will be able to utilize the existing road and pipelines in the area and also minimize surface disturbance.
- BBC hereby certifies it owns a working interest along with Berry Petroleum Company, and together we own 100% of the working interest within 460 feet of the entire directional well bore.
- Our ownership rights under our Exploration and Development Agreement with the Ute Indian Tribe and UDC provides for the drilling of exploratory wells.
   Said agreement provides that we consult with these owners regarding the drilling of this well.

Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-11. If you should have any questions or need further information, please contact me at 303-312-8546.

Sincerely,

Reed Haddock

Permit Analyst

1099 18TH STREET

**SUITE 2300** 

DENVER, CO 80202

303.293.9100

F 303.291.0420



April 27, 2007

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DIV. OF CIL, GAS & MINING

Utah Division of Oil, Gas and Mining P.O. Box 145801 1594 West North Temple, Suite 1210 Salt Lake City, Utah 84114-5801

# 16-28-46 DLB Tribal Surface/Tribal Minerals NESE, Section 28-T4S-R6W Duchesne County, Utah

Laddoc K

Diana Mason, Permitting - Petroleum Technician:

Enclosed please find the original copy of Bill Barrett Corporation's (BBC) application for permit to drill the above captioned well. Montgomery Archeological Consultants conducted a Class III archeological survey for this location. The results of this survey have been outlined in Montgomery's report dated April 17, 2007. Based on the findings, a determination of "no historic properties affected" is recommended for this site.

Please contact me at (303) 312-8546 if you need anything additional or have any questions.

Sincerely,

Reed Haddock Permit Analyst

**Enclosures** 

1099 18TH STREET
SUITE 2300
DENVER, CO 80202
P 303.293.9100
F 303.291.0420

FORM APPROVED Form 3160-3 OMB No. 1004-0137 Expires March 31, 2007 (April 2004) UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR BIA 14-20-H62-5500 BUREAU OF LAND MANAGEMENT 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER **UTE INDIAN TRIBE** 7 If Unit or CA Agreement, Name and No. la. Type of work: DRILL REENTER 8. Lease Name and Well No. Multiple Zone # 16-28-46 DLB Oil Well 🗸 Gas Well ✓ Single Zone lb. Type of Well: 9. API Well No. Name of Operator BILL BARRETT CORPORATION Pending 43-013-321 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 3a. Address 1099 18th Street, Suite 2300 Denver CO 80202 Altamont (303) 312-8546 11. Sec., T. R. M. or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any Nate requirements.\*) NESE, 1834' FSL, 344' FEL Section 28-T4S-R6W U.S.B.&M. At proposed prod. zone SESE, 660' FSL, 660' FEL 13 State 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* Duchesne UT Approximately 12.3 miles southwest of Duchesne, Utah 17. Spacing Unit dedicated to this well 15. Distance from proposed\* 16. No. of acres in lease location to nearest property or lease line, fl. (Also to nearest drig. unit line, if any) 344' SHL; 660' BHL 20. BLM/BIA Bond No. on file 19. Proposed Depth 18. Distance from proposed location\* to nearest well, drilling, completed, Nationwide Bond #WYB000040 1,450' abandoned well 9537' MD applied for, on this lease, ft. 23. Estimated duration 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 45 days 7254' ungraded ground 07/01/2007 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form: Bond to cover the operations unless covered by an existing bond on file (see 1. Well plat certified by a registered surveyor. Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be also with the appropriate Forest Service Office). Operator certification Such other site specific information and/or plans as may be required by the authorized officer. Name (Printed/Typed) 25. Signatur 04/27/2007 Reed Haddock Title Name (Printed/Typed)

Approved by Title

BRADLEY G. HILL OFENVIRONMENTAL MANAGER

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

Federal Approval of this Action is Necessary

FUCIVED

APR 3 0 2007

Surl

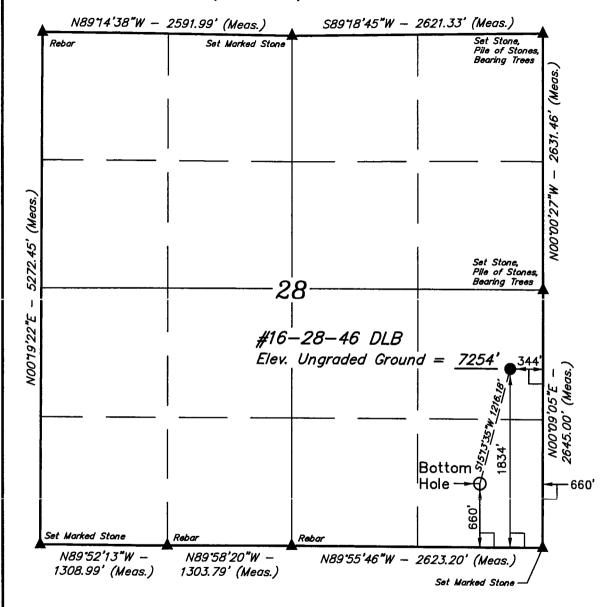
537580X 4438 9404 40.101989 - 110. 659102

BHL

5:7485X 44386024 40 098768 -110.56 6235

DIV. OF CIL, CAS & MINING

## T4S, R6W, U.S.B.&M.



#### LEGEND:

 $= 90^{\circ} \text{ SYMBOL}$ 

= PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)

LATITUDE =  $40^{\circ}06'06.92''$  (40.101922)

LONGITUDE = 110°33′34.80" (110.559667)

(NAD 27)

LATITUDE =  $40^{\circ}06'07.07''$  (40.101964)

LONGITUDE = 110°33'32.24" (110.558956)

#### BILL BARRETT CORPORATION

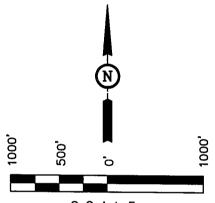
Well location, #16-28-46 DLB, located as shown in the NE 1/4 SE 1/4 of Section 28, T4S, R6W, U.S.B.&M., Duchesne County, Utah.

#### BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET.

#### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



#### SCALE

THIS IS TO CERTIFY THAT THE ABOVE TO WAS FRENCH FROM FIELD NOTES OF ACTUAL SURVEYS OF BY ME OR OF THE SUPERVISION AND THAT THE SAFEARE THOSE THOSE THE SEST OF MY KNOWLEDGE AND BELLET

RECEIVED LAND SURVEYORS
RECEIVED NO 161319
STATE OF SUBPLIT A

## UINTAH ENGINEERING & LAND SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: DATE DRAWN: 04-10-07 04-12-07		
PARTY D.S. J.A. P.M.	REFERENCES G.L.O. PLA	AT	
WEATHER COOL	FILE BILL BARRET	T CORPORATION	

#### HAZARDOUS MATERIAL DECLARATION

WELL NO. # 16-28-46 DL3 - LEASE NO. BIA 14-20-H62-5500

Bill Barrett Corporation guarantees that during the drilling and completion of the above referenced well, we will not use, produce, or store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Super Amendments and Reauthorization Act (SARA) of 1986.

Bill Barrett Corporation guarantees that during the drilling and completion of the above referenced well, we will use, produce, store, transport, or dispose less than the threshold planning quantity (TPQ) of any extremely hazardous substances as defined in 40 CFR 355.

#### **DRILLING PLAN**

#### BILL BARRETT CORPORATION # 16-28-46 DLB

SHL: NESE, 1834' FSL & 344' FEL, Section 28-T4S-R6W BHL: SESE, 660' FSL & 660' FEL, Section 28-T4S-R6W Surface Owner: Tribal (Ute)

Duchesne County, Utah

## 1 - 3. Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals

<u>Formation</u>	Depth – MD
Duchesne River/Uinta	Surface
Green River	3,754'
Douglas Creek	4,555'
Black Shale	5,238'
Castle Peak	5,522'
Wasatch	6,151' *
North Horn	8,062' *
TD	9,537'

#### \*PROSPECTIVE PAY

The Wasatch and the North Horn are primary objectives for oil/gas.

#### 4. Casing Program

Hole Size	SETTING (FROM)	G DEPTH (TO)	Casing Size	Casing Weight	Casing Grade	Thread	Condition
12 1/4"	surface	960'	9 5/8"	36#	J or K 55	ST&C	New
7 7/8"	surface	9,537'	5 ½"	17#	N or I 80	LT&C	New

#### 5. <u>Cementing Program</u>

9 5/8" Surface Casing	Approximately 330 sx Halliburton Light Premium with additives mixed at 12.3 ppg (yield = 1.43 ft <sup>3</sup> /sx) circulated to surface with 100% excess
5 1/2" Production Casing	Approximately 180 sx Halliburton Hi-Fill Modified cement with additives mixed at 11.0 ppg (yield = 3.81 ft <sup>3</sup> /sx).  Approximately 760 sx Halliburton Light Premium Plus cement with additives mixed at 13.5 ppg (yield = 1.58 ft <sup>3</sup> /sx). Top of cement to be determined by log and sample evaluation; estimated TOC 900'.

#### 6. Mud Program

Interval	Weight	Viscosity	Fluid Loss (API filtrate)	<u>Remarks</u>
40' – 960'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
960' – TD	8.6 – 10.6	42-52	15 cc or less	KCL Polymer Fluid System

Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.

#### 7. BOP and Pressure Containment Data

Depth Intervals	BOP Equipment				
0 – 960'	No pressure control required				
960' – TD	11" 3000# Rain Type BOP				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11" 3000# Amular BOP				
- Drilling spool to a	accommodate choke and kill lines;				
Ancillary and cho	ke manifold to be rated @ 3000 psi;				
- Ancillary equipm	ent and choke manifold rated at 3,000#. All BOP and BOPE tests will be in				
accordance with t	he requirements of onshore Order No. 2;				
- The BLM and the	State of Utah Division of Oil, Gas and Mining will be notified 24 hours in				
advance of all BO	OP pressure tests				
- BOP hand wheels	s may be underneath the sub-structure of the rig if the drilling rig used is set up				
To operate most e	efficiently in this manner.				

#### 8. Auxiliary equipment

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

#### 9. Testing, Logging and Core Programs

Cores	None anticipated;
Testing	None anticipated: drill stem tests may be run on shows of interest;
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;
Surveys	MWD as needed to land wellbore:
Logging	DIL-GR-SP, FDC-CNL-GR-CALIPER-Pe-Microlog, Sonic-GR (all TD to surface).
20888	FMI & Sonic Scanner to be run at geologist's discretion.

## 10. Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 5176 psi\* and maximum anticipated surface pressure equals approximately 3110 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

Bill Barrett Corporation Drilling Program # 16-28-46 DLB Duchesne County, Utah

- \*Max Mud Wt x 0.052 x TD = A (bottom hole pressure)
- \*\*Maximum surface pressure =  $A (0.22 \times TD)$

#### 11. Location and Type of Water Supply

Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W.

#### 12. Drilling Schedule

Location Construction:

Approximately June 15, 2007

Spud:

Approximately July 1, 2007

Duration:

20 days drilling time

45 days completion time



# **BILL BARRETT CORPORATION**

1099 18<sup>th</sup> St., Suite 2300 Denver, CO 80202

Field: Brundage/Lake Canyon

Geological Basin: <u>Uinta</u> Well Name: <u>General</u>

Location: Duchesne County, UT

# KCL Polymer Drilling Fluid Recommendation

Prepared for: Mr. Dominic Spencer

August 17, 2006

Submitted by:
Isaac Womack, Tech. Prof., Baroid product service line, Halliburton
1125 17<sup>th</sup> St., Suite 1900
Denver, CO 80202
303.675.4476
Isaac.womack@Halliburton.com



**Brundage Canyon** 

**Duchesne County, Utah** 

## DRILLING PROGRAM BRIEFING

Well total depth

8,500' TMD

Casing design

Surface

Hole Size 12 1/4"

Casing 9 5/8"

**Length** 750'

:

Production

7 7/8"

5 1/2"

8500'

\*Fluid density

8.3 - 9.0 ppg from

0' to 750'

8.6 - 10.0 ppg from 750' to 8500'

NOTE: Data taken from off-set wells in Duchesne County, UT

\*The drilling fluid density schedule is intended as a guideline only. Actual drilling fluid densities should be determined by well bore conditions and drilling parameters.

Estimated drilling days

0' to 750'

= 2 days (12 1/4" Hole)

750' to 8,500'

= 16days (7 7/8" Hole)

Total = 18 days

**Drilling fluid systems** 

0' to 750'

- Freshwater Spud Mud

750' to 8,500'

- KCL Polymer

Solids control equipment:

0' - 8,500'

- Two Shale Shakers

- Desander / Desilter / Degasser

- One High Speed Centrifuge

(if available)

Est. total drilling fluid cost:

\$ 17,219.00

## DRILLING FLUID PROGRAM SUMMARY

The following drilling fluid systems are proposed for the Brundage Canyon well:

HOLE SIZE (in.)	DRILLING FLUID SYSTEM	FLUID DENSITY (ppg)	INTERVAL LENGTH FROM - TO
12 1/4"	Freshwater spud mud fluid system	8.3 – 9.0	
8 3/4"	KCL Polymer fluid system		0' to 750' 750' to 8,500'

## 12 1/2" Hole Section ( 0' to 750' TMD )

A freshwater spud mud drilling fluid system is recommended to drill this interval. Drill out conductor casing shoe with freshwater using additions of AQUAGEL and EZ-MUD to maintain fluid properties, as well as in hi-vi sweeps to facilitate hole cleaning. Pump BARACARB (25/50)/ sawdust sweeps prior to tripping out of the hole. Monitor the drillstring for tight connections. Expect minor to severe lost circulation in this interval. Pump sweeps of saw dust/ BARACARB at 5-10 ppb for minor seepage and sweeps of N-seal at 5 ppb and saw dust at 10 ppb for more severe losses. When total depth (TD) is reached make a wiper trip to the shoe to "clean up" the well bore, a string of 9 5/8" casing will then be set and cemented back to surface.

## 7 7/8" Hole Section ( 750' to 8,500' TMD )

After drilling the surface hole section, dump all of the drilling fluid used in the surface interval to the reserve pit. Check reserve pit water to make sure it is acceptable to use for drilling fluid.

Mud up with the following:

- .5 lb./bbl N-Vis P
- 2 lb/bbls ZEOGEL
- .5 lb/bbl BARACOR 700 (or phosphates over 1300 ppm (see corrosion program))

Maintain 3% KCL in the reserve pit while drilling this section. (add 3.5 ppb for every 1% Test for % of KCL

((ml of .282 Silver Nitrate added \* 10,000)/3280) = %KCL

\*record and report this concentration on each mud report

Add BARACAT to reserve pit to flocculate out solids. This system should have sufficient YP to keep the hole clean while drilling this interval.

Lost Circulation: Should losses occur while drilling the lateral section add BARACARB (5) OR BARACARB (50) to control. (BARACARB can be acidized) Concentrations of BARACARB will be determined by the losses encountered. Expect increased lost circulation with increases in drilling fluid density. Continue to monitor and record all



#### **Brundage Canyon**

## **Duchesne County, Utah**

instances of gas kicks, water flows and lost circulation, adjust mud weight as needed. Sweeps of LUBRA-BEADS may help reduce mechanical torque due to the dog-legs. When lateral has been drilled, circulate the hole clean and run production casing.

	†	Recommen	ded Drill	ing Fluid	is Propert	les	
Drilling Depth (ft)	Fluid Density (ib/gai)	Funnel Viscosity (sec/qt)	API Filtrate (mi)	рН	Plastic Viscosity (cP)	Yield Point (ibs/100ft²)	Low Gravity Solids (% by
0' – 750'	8.3 - 8.8	26 36	NC	7.0- 8.5	0 – 15	0 - 24	<u>Vol)</u> < 8

- Spud with freshwater. Circulate through a reserve pit if possible.
- Mix 10.0-ppb AQUAGEL, 1.0 ppb EZ MUD, and 0.5-ppb lime in 50 bbl sweeps to improve well bore deaning.
- ♦ Mix 1.0 gal. EZ-MUD down drill sting on connections for shale inhibition and optimum drill solids removal by the solids control equipment.
- Mix sweeps of saw dust/ BARACARB(25/50) at 5-10 ppb for minor seepage and N-seal at 5 ppb and saw dust at 10 ppb for more severe losses.
- If well bore conditions Indicate, mud up to a KCL fluid system as indicated in the production

Drilling Depth (ft)	Fiuld Density (lb/gal)	Funnel Viscosity (sec/qt)	API Flitrate (mi)	рН	Plastic Viscosity (cP)	Yield Point (lbs/100ft²)	Low Gravity Solids (% by Vol)
750' – 8,500'	8.6 - 10.6	42 - 52	<20	10.5- 12.0	0-15	0-20	< 8
		Production of	casing: 5 ½		i i	0-20	<b>8</b> >

- Drill out the surface casing shoe with KCL Polymer fluid system.
- Build initial pH with caustic soda then maintain with lime
- ♦ Additions of 0.5-ppb BARAZAN D can be used to enhance the low end rheology for optimum well bore cleaning and a lower solids drilling fluid.
- ♦ For seepage losses sweep the hole with 10.0-ppb BARACARB (25/50) in sweeps.
- ♦ For more severe losses sweep the hole with 5.0-ppb N-SEAL and 10.0-ppb Saw Dust. If losses can't be controlled, spot an 80.0-ppb HYDRO-PLUG pill across the loss zone(s).
- ♦ Spot pills of LUBRA-BREADS and/or TOURQE-LESS for additional torque and drag reduction as needed in dog-legs.

## Bill Barrett Corporation E-bill 1099 18th Street - Suite 2300 Denver, Colorado 80202

Brundage Canyon General

Duchesne County, Utah United States of America

# **Cementing Recommendation**

Prepared for: Dominic Spencer

August 15, 2006

Version: 1

Submitted by:
Pat Kundert
Halliburton Energy Services
1125 17th Street - Suite 1900
Denver, Colorado 80202
+303.886.0839

**HALLIBURTON** 

## HALLIBURTON

## Job Recommendation

## 9 5/8" intermediate

Fluid Instructions Fluid 1: Water Spacer Gelled Water Ahead

Fluid Density:

8.33 lbm/gal

Fluid Volume:

20 bbl

Fluid 2: Primary Cement Premium Plus - Type III

94 lbm/sk Premium Plus - Type III (Cement-api)

0.2 % Versaset (Thixotropic Additive) 2 % Calcium Chloride (Accelerator)

0.25 lbm/sk Flocele (Lost Circulation Additive)

Fluid Weight Slurry Yield:

14.50 lbm/gal 1.43 ft<sup>3</sup>/sk

Total Mixing Fluid:

6.89 Gal/sk

Top of Fluid:

0 ft

Calculated Fill:

750 ft

Volume:

66.16 bbl

Calculated Sacks: Proposed Sacks:

259.74 sks

260 sks

## HALLIBURTON

## Job Recommendation

## 5 1/2" Production

Fluid Instructions Fluid 1: Water Spacer KCL Water Preflush  Fluid 2: Lead Cement – (3500 – 750') Halliburton Hi-Fill Modified 94 lbm/sk Type 5 Cement (Cement) 16 % Bentonite (Light Weight Additive)	Fluid Density: Fluid Volume: Fluid Weight Slurry Yield: Total Mixing Fluid:	10 bbl  11 lbm/gal 3.81 ft <sup>3</sup> /sk
0.75 % Econolite (Light Weight Additive) 7.5 lbm/sk Gilsonite (Lost Circulation Additive) 2 lbm/sk Granulite TR 1/4 (Lost Circulation Additive) 3 % Salt (Salt) 0.2 % HR-7 (Retarder)	Top of Fluid: Calculated Fill: Volume: Calculated Sacks: Proposed Sacks:	750 ft 2750 ft 106.07 bы
Fluid 3: Tail Cement – (TD – 3500') Halliburton Light Premium Plus (Type 5) 3 % KCL (Clay Control) 1 % Econolite (Light Weight Additive) 0.5 % Halad(R)-322 (Low Fluid Loss Control) 0.6 % HR-5 (Retarder) 0.25 lbm/sk Flocele (Lost Circulation Additive) 1 lbm/sk Granulite TR 1/4 (Lost Circulation Additive)	Fluid Weight Slurry Yield: Total Mixing Fluid: Top of Fluid: Calculated Fill: Volume: Calculated Sacks: Proposed Sacks:	13.50 lbm/gal 1.58 ft <sup>3</sup> /sk 7.77 Gal/sk 3500 ft 6000 ft 232.46 bbl 826.05 sks 830 sks

## # 16-28-46 DLB Proposed Cementing Program

Job Recommendation	Sur	face Casing	
Lead Cement - (960' - 0')			
Halliburton Light Premium	Fluid Weight:	12.3	lbm/gal
2.0% Calcium Chloride	Slurry Yield:	1.43	ft <sup>3</sup> /sk
0.25 lbm/sk Ploy-E-Flake	Total Mixing Fluid:	10.6	Gal/sk
, -	Top of Fluid:	0'	
	Calculated Fill:	960'	
	Volume:	120.48	bbl
	Proposed Sacks:	330	sks

Job Recommendation		Produc	tion Casing
Lead Cement - (4055' - 960')			
Halliburton Hi-Fill Modified	Fluid Weight:	11.0	lbm/gal
16.0% Bentonite	Slurry Yield:	3.81	ft <sup>3</sup> /sk
0.75% Ecpnolite	Total Mixing Fluid:	23.00	Gal/sk
7.5 lbm/sk Gilsonite	Top of Fluid:	960'	
2.0 lbm/sk Granulite TR	Calculated Fill:	3,095'	
3.0% Salt	Volume:	119.37	bbl
0.2% HR-7	Proposed Sacks:	180	sks
Tail Cement - (9537' - 4055')			
Halliburton Light Premium Plus	Fluid Weight:	13.5	lbm/gal
3.0% KCl	Slurry Yield:	1.58	ft <sup>3</sup> /sk
1.0% Econolite	Total Mixing Fluid:	7.77	Gal/sk
0.5% Halad®-322	Top of Fluid:	4,055'	
0.6% HR-5	Calculated Fill:	5,482'	:
0.25 lbm/sk Flocele	Volume:	211.46	bbl
1.0 lbm/sk Granulite	Proposed Sacks:	760	sks

Well name:

Operator: **Bill Barrett Corporation** 

Brundage / Lake Canyon General

String type: Surface

ocation:

Duchesne County, UT

Design parameters:

Collapse

Mud weight:

8.60 ppg

Minimum design factors:

Collapse:

Design factor

1.125

**Environment:** 

H2S considered?

Surface temperature:

Bottom hole temperature:

Temperature gradient: Minimum section length:

No 70.00 °F

79 °F

1.22 °F/100ft 750 ft

Burst:

Design factor

1.10

Cement top:

Surface

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient:

303 psi 0.22 psl/ft

Calculated BHP

Design is based on evacuated pipe.

468 psi

8 Round LTC: Buttress:

Premium:

Body yield:

Tension:

8 Round STC: 1.80 (J) 1.80 (J) 1.80 (J) 1.80 (J)

1.80 (B)

Tension is based on buoyed weight. Neutral point:

655 ft

Non-directional string.

Re subsequent strings: Next setting depth: Next mud weight:

Next setting BHP:

Fracture mud wt: Fracture depth:

8,500 ft

9.700 ppg 4,283 psi 12.000 ppg 750 ft

Injection pressure 468 psi

Run	Segment								
Seq	Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth	Measured Depth	Drift Diameter	Internal Capacity
1	750	9.625	36.00	J-55	ST&C	<b>(ft)</b> 750	<b>(ft)</b> 750	( <b>in)</b> 8.7 <b>9</b> 6	(ft³) 53.4
Run Seq	Collapse Load (psl)	Collapse Strength (psi)	Coliapse Design	Burst Load	Burst Strength	Burst Design	Tension Load	Tension Strength	Tension
1	335	2020	<b>Factor</b> 6.029	(psi) 468	<b>(psi)</b> 3520	Factor 7.53	(Kips) 24	(Kips) 394	<b>Design</b> Factor 16.72 J

Prepared Dominic Spencer by: Bill Barrett

Phone: (303) 312-8143 FAX: (303) 312-E195

Date: July 21,2006

Denver, Colorado

ose is based on a vertical depth of 750 ft, a mud weight of 8.6 ppg. The casing is considered to be evacuated for collapse purposes. use strength is based on the Westcott, Duniop & Kemier method of biaxial correction for tension.

strength is not adjusted for tension.

Well name:

Operator:

**Bill Barrett Corporation** 

String type:

Production

Design is based on evacuated pipe.

ocation:

Duchesne County, UT

Brundage / Lake Canyon General

Design parameters: Collapse

Mud weight:

9.70 ppg

Minimum design factors: Collapse:

Design factor

1.125

Environment:

H2S considered? Surface temperature:

Bottom hole temperature: Temperature gradient:

70.00 °F 186 °F 1.22 °F/100ft

No

Minimum section length:

1,500 ft

Burst:

Design factor

1.10

1.80 (J)

1.80 (J)

1.60 (J)

1.50 (J)

Cement top:

2,000 ft

Max anticipated surface

No backup mud specified.

pressure: Internal gradient:

Calculated BHP

Burst

2,697 psi 0.22 psi/ft

4,787 psi

Buttress: Premium:

Body yield:

Tension: 8 Round STC:

8 Round LTC:

1.50 (B) Tension is based on buoyed weight.

Non-directional string.

Neutral point: 8,103 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (ibs/ft)	Grade	End Finish	True Vert Depth	Measured Depth	Drift Diameter	Internal Capacity
1	9500	5.5	17.00	N-80	LT&C	(ft) 9500	(ft) 9500	(in) 4.767	(ft³) 327.4
Run Seq 1	Som .	Collapse Strength (psi) 6290	Collapse Design Factor 1.314	Load Street	Burst Strength (psl) 7740	Burst Design Factor 1.62	Tension Load (Kips) 138	Tension Strength (Kips) 348	Tension Design Factor 2.53 J

Prepared Dominic Spencer by: Bill Barrett

Phone: (303) 312-8143 FAX: (303) 312-8185

Date: August 11,2006 Denver, Colorado

Collapse is based on a vertical depth of 9500 ft, a mud weight of 9.7 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemier method of blaxial correction for tension.

Burst strength is not adjusted for tension.

	Performance	Outside Diamete				H80 Per Burst,	formance	Propertie			J-55 Pe	rformance	Dron	-	Carlotta and the Street Street, Street,	The state of the s	Control of the last of the las		-
	Property		lb per f		psi	. — — — — —			Maximur	n Collaps	e Burst	Tonoine	Propertie		-	N-80 Per	formance	Dronout	
			•		þai	psi	Pipe Body		Set Denti	h, psi	psi	Tension,		Maximum		Burst,	Tension,	Liobelik	
	Comparison					_	Yield	Strengt	feet	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Pol	Pipe Bod		Set Depth.	psi	psi	Pipe Body	OUU IDS	Ma
		4.500	9.50	Short	2000		~~····					Yield	Strength	feet	-				Set
			10.50	Short		6380	221	138	6930	3310	4000	_				***************************************	Yield	Strength	1 1
			11.60	Long		6970	241	173	8780	4010	4380	152	101	5890	3900	0000			
				LUING	6350	7780	267	201	9610		4790	165	132	7000	4940	6380	221	143	(
		5.500	14.00	٠.					9010	4960	5350	184	162	7760		6970	241	186	- 1
		3.000		Short	3620	6210	322	234	0440					7700	6350	7780	267	223	10
			15.50	Long	4990	7000	361	282	6440	3120	4270	222	172	5550				_	•
			17.00	Long	6280	7740	397		8870	4040	4810	248	217		3620	6210	322	243	6
		7.000					997	320	10470	4910	5320	273		7180	4990	7000	361	306	
		7.000	20.00	Short	2740	5440	400					-, 0	247	8060	6280	7740	397	348	3
			23.00	Long	3830	6340	460	320	4870	2270	3740	316						J40	11
			26.00	Long	5410		532	428	6810	3270	4360		234	4040	2740	5440	460	004	
					9410	7240	604	502	9620	4320	4980	366	313	5810	3830	6340	532	331	4
		8.625	24.00	Short	1400					TOLU	4900	415	367	7680	5410	7240		442	6
			28.00	Long	1430	4290	555	337	2540	1370	00=0					7470	604	519	9
			32.00		2160	4930	636	478	3840	1880	2950	381	244	2440	1430	4290			
-		The second secon		Long	3050	5710	732	574	5420	2530	3390	437	348	3340	2160	4930	555	346	2
1-8	0 Dimensions,	<u></u>	_			-	عوستهموا والمال مناتب		0720	2030	3930	503	417	4500	3050	5710	636	493	3
	Torques and	Outside	Weight	Thread		Dime	ensions, in	ch								3710	<b>73</b> 2	591	54
		Diameter,	T&C,	Туре	Wall	Inside				Mak	e-Up Tor	que	Hydro-					***************************************	
	Hydro-Test	inch	lb per ft		Thickness	Diameter		Coupling	Make-up		ft x lbs		Tool						
	Pressures							Outside	Loss (	Optimum	Minimum	Maximum F	rocour						
	. 100001163	4					L	Diameter					_		ADL D. II				
		4.500	9.50	Short	0.205	4.090	9.005	_					psi		API BUILE	tin 5C3,	Sixth Editio	, אר	
			10.50	Short		4.052		5.000	2.000	1380	1040	1730	E000	(C)	Ctober 199	94 was u	sed to dete	mine the	e
			11.60	Long				5.000	2.625	1790	1340		5800	lis	ted prope	rti <del>o</del> s.			•
					0.230	4.000	3.875	5.000	3.000	2190	1640		6400	2.	The vertic	al set de	pth was co		
		5.500	14.00	Short	0.244					00	1040	2740	7100	us	ing a 9 62	5 lb nor	U.S. gallor	mputed	
			15.50	Long		5.012	4.887	B.050	2.875	2340	4700			an	d safaty f	o io. pei	U.S. gattor	n mud,	
			17.00			4.950	4.825		_		1760	2930	5700	res	a onloty to	actors of	1.125, 1.0	and 1.8	
			17.00	Long	0.304	4.892				2950	2210	3690	6400		poonsery,	tor colla	pse, burst	and	
		7.000	20.00				•	500	3.500	3350	2510		7100	101	ision.				
			20.00	Short		6.456	6.331 7	7.656	0 4 6 5					3. 1	Products a	are avails	able plain e	nd and	
			23.00	Long	0.317	<b>-</b>		•			2400	4000	5000	wit	h IPSCOis	S Dremiu	DI COUDECTS		
		:	26.00	Long						4280	3210		5800	QB	2.	- P. O(18U)	CONTINUECTS	UB1 and	đ
	_				'		0.101 /	.656	4.000		3770		3600 3600	<i>A A</i>	٠ ١				
				Short	0.264	3.097	7.070 -						J-000	4. <i>f</i>	us a servic	ce, IPSC	O offers ca	sing	
		2	~~ ~~	Long		-			3.000 ;	3370	2530	<b>421</b> 0 s	2000	Stni	ng design:	s upon re	equest.	•	
400 may 1 may	A CONTRACTOR OF THE PARTY OF TH	8	~~ ~~	Long					1.500 a		3590		3900						
	The state of the s	the same of the same of the same of	-		002	.821	7.875 9	.625			4310	JOOU 4	1500						

The information and data contained herein are accurate to our knowledge, based upon standard industry calculations. Buyers are encouraged to make their own evaluations of the above derived performance properties for their particular use. The specific warranty applicable to these goods is as contained in IPSCO's Order Acknowledgment, Conditions of Sale.



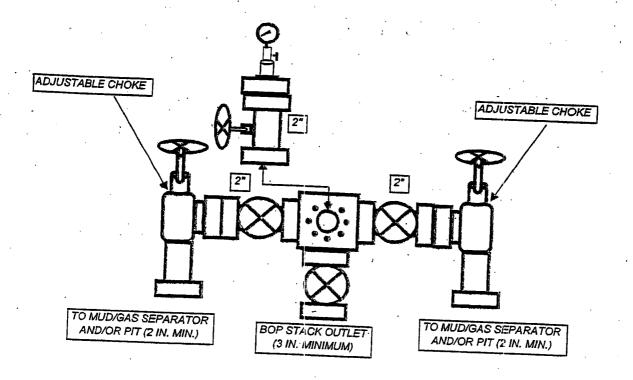
P.O. Box 18 Camanche, lowa 52730 Phone: (563) 242-0000 Toli Free: 1-800-950-4772

400 505-3rd Street SW Calgary, Alberta T2P 3E6 Phone: (403) 543-8000

P.O. Box 1670 Regina, Saskatchewan S4P 3C7 Phone: (306) 924-7700

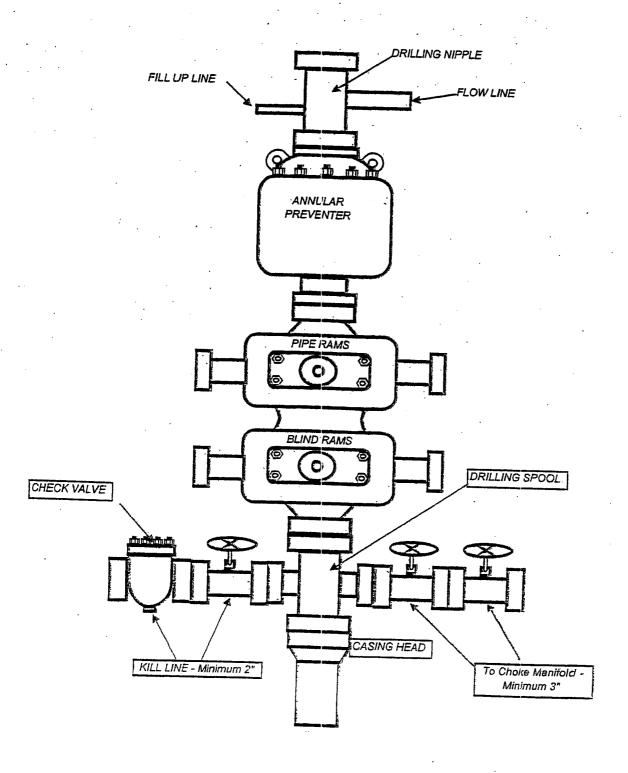
# BILL BARRETT CORPORATION

TYPICAL 3,000 p s.i. CHOKE MANIFOLD



# **BILL BARRETT CORPORATION**

## TYPICAL 3,000 p.s.i BLOWOUT PREVENTER





## **Drilling Services**

## **Proposal**



## **BILL BARRETT CORPORATION**

#16-28-46 DLB

**DUCHESNE COUNTY, UTAH** 

WELL FILE:PLAN1

**APRIL 25, 2007** 

363 North Sam Houston Pkwy E, Suite 600 Houston, Texas 77060 USA +1.281.260.5600 Main +1.281.260.2763 Fax www.weatherford.com



#16-28-46 DLB 1834' FSL, 344' FEL SECTION 28-T4S-R6W DUCHESNE COUNTY, UTAH

SITE DETAILS

#16-28-46 DLB SECTION 28-T4S-R6W 1834' FSL, 344' FEL

Site Centre Latitude: 40°06'06.920N Longitude: 110°33'34.800W

Ground Level: 7252.70 Positional Uncertainty: 0.00 Convergence: 0.60

## \*

## Weatherford

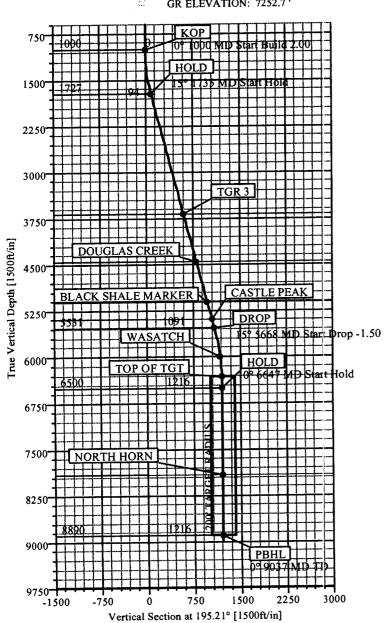
					SECTION	N DETAILS				
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSœ	Target
1 2 3 4	0.00 1000.00 1734.66 5667.80	0.00 0.00 14.69 14.69	195.21 195.21 195.21 195.21	0.00 1000.00 1726.64 5531.15 6500.00	0.00 0.00 -90.40 -1053.07 -1173.61	0,00 0,00 -24.58 -286.33 -319.10	0.00 0.00 2.00 0.00 1.50	0.00 0.00 195,21 0.00 180.00	0.00 0.00 93.69 1091.30 1216.22	
5	6647.35 9037.35	0.00 0.00	195.21 195.21	8890.00	-1173.61	-319.10	0.00	195.21	1216.22	PBHL_16-28-46

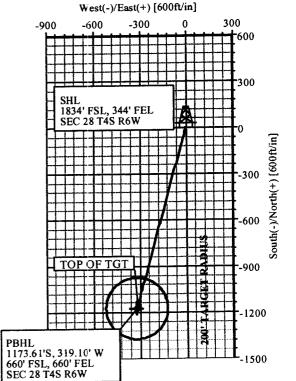
9537

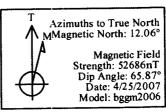
FORMATION TOP DETAILS										
No.	TVDPath	MDPath	Formation							
1	3680.00	3754.07	TGR 3							
2	4455.00	4555.27	DOUGLAS CREEK							
	5115.00	5237.58	BLACK SHALE MARKER							
3 4	5390.00	5521.88	CASTLE PEAK							
5	6005.00	6150.95	WASATCH							
6	7915.00	8062.35	NORTH HORN							

#### **ASSUMED 15' KB ELEVATION**

KB ELEVATION: 7267.7' GR ELEVATION: 7252.7'







TOTAL CORRECTION TO TRUE NORTH: 12.06°

CASING DETAILS

No. TVD MD Name Size

No casings on this wellpath

Plan: Plan #1 (#16-28-46 DLB/1)

Created By: ROBERT SCOTT

Date: 4/25/2007

## Weatherford International, Ltd. PLAN REPORT

Company: BILL BARRETT CORP DUCHESNE COUNTY, UTAH Field:

#16-28-46 DLB #16-28-46 DLB

Well: Wellpath:

Site:

Date: 4/25/2007

Time: 17:15:00

Page: Site: #16-28-46 DLB, True North

Co-ordinate(NE) Reference: SITE 7267.7 Vertical (TVD) Reference: Section (VS) Reference:

Well (0.00N, 0.00E, 195.21Azi) Minimum Curvature

Db: Sybase

1

DUCHESNE COUNTY, UTAH Field:

Map System: US State Plane Coordinate System 1983

Geo Datum: GRS 1980 Sys Datum: Mean Sea Level Map Zone:

Survey Calculation Method:

Utah, Central Zone

Coordinate System: Site Centre bggm2006 Geomagnetic Model:

Site:

#16-28-46 DLB

SECTION 28-T4S-R6W

1834' FSL, 344' FEL

Site Position: Geographic From:

0.00 ft **Position Uncertainty:** 

7207246 39 ft Northing: 1903446 37 ft Easting:

Latitude: Longitude:

Slot Name:

6.920 N 40 6 110 33 34.800 W

True North Reference: 0.60 deg Grid Convergence:

Ground Level: Well: Well Position:

Wellpath: 1

#16-28-46 DLB

+N/-S +E/-W

0.00 ft Northing: 0.00 ft Easting:

Latitude: 7207246 39 ft 1903446 37 ft Longitude:

40 6 6.920 N 33 34.800 W 110

Position Uncertainty:

0.00 ft

7252.70 ft

**Drilled From:** 

Tie-on Depth: **Above System Datum:** 

Surface 0.00 ft Mean Sea Level 12.06 deg

**Current Datum:** Magnetic Data: Field Strength: Vertical Section:

4/25/2007

0.00

195.21

52686 nT Depth From (TVD)

+N/-S ft 0.00

Height 7267 70 ft

Declination: Mag Dip Angle: +E/-W

65.87 deg Direction

ft deg 195.21 0.00

Plan:

Principal:

9037.35

Plan #1

0.00

Yes

Date Composed:

4/25/2007

Version: Tied-to:

From Surface

Plan Section Information

MD ft	incl	Azim deg	TVD	+N/-S	+E/-W	DLS deg/100ft	Build dea/100ft	Turn deg/100ft	TFO deg	Target
	deg						0.00	0.00	0.00	
0.00	0.00	195.21	0.00	0.00	0.00	0.00				
1000.00	0.00	195.21	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1734.66	14.69	195.21	1726.64	-90.40	-24.58	2.00	2.00	0.00	195.21	
5667.80	14.69	195.21	5531.15	-1053.07	-286.33	0.00	0.00	0.00	0.00	
6647.35	0.00	195.21	6500.00	-1173.61	-319.10	1.50	-1.50	0.00	180.00	
9037.35	0.00	195.21	8890.00	-1173.61	-319.10	0.00	0.00	0.00	195.21	PBHL_16-28-46

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
1000.00	0.00	195.21	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
1100.00	2.00	195.21	1099.98	-1.68	-0.46	1.75	2.00	2.00	0.00	
1200.00	4.00	195.21	1199.84	-6.73	-1.83	6.98	2.00	2.00	0.00	
1300.00	6.00	195.21	1299.45	-15.14	-4.12	15.69	2.00	2.00	0.00	
1400.00	8.00	195.21	1398.70	-26.90	-7.31	27.88	2.00	2.00	0.00	
1500.00	10.00	195.21	1497.47	-42.00	-11.42	43.52	2.00	2.00	0.00	
1600.00	12.00	195.21	1595.62	-60.41	-16.43	62.60	2.00	2.00	0.00	
1700.00	14.00	195.21	1693.06	-82.12	-22.33	85.10	2.00	2.00	0.00	
1734.66	14.69	195.21	1726.64	-90.40	-24.58	93.69	2.00	2.00	0.00	HOLD
1800.00	14.69	195.21	1789.84	-106.40	-28.93	110.26	0.00	0.00	0.00	
1900.00	14.69	195.21	1886.57	-130.87	-35.58	135.62	0.00	0.00	0.00	
2000.00	14.69	195.21	1983.30	-155.35	-42.24	160.99	0.00	0.00	0.00	
2100.00	14.69	195.21	2080.03	-179.82	-48.89	186.35	0.00	0.00	0.00	
2200.00	14.69	195.21	2176.76	-204.30	-55.55	211.72	0.00	0.00	0.00	
2300.00	14.69	195.21	2273.49	-228.77	-62.20	237.08	0.00	0.00	0.00	

## Weatherford International, Ltd. PLAN REPORT

Company: BILL BARRETT CORP Field: DUCHESNE COUNTY, UTAH

Site: #16-28-46 DLB #16-28-46 DLB Well:

Wellpath: 1

Date: 4/25/2007

Page:

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Time: 17:15:00 Page: :: Site: #16-28-46 DLB, True North SITE 7267.7

Well (0.00N,0.00E,195.21Azi)

Section (VS) Reference: Survey Calculation Method:

Minimum Curvature

Db: Sybase

2

MD	Incl	Azim	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
ft	deg	deg						0.00	0.00	
2400.00	14.69	195.21	2370.22	-253.25	-68.86	262.44	0.00 0.00	0.00	0.00	
2500.00	14.69	195.21	24 <b>6</b> 6.95	-277.73	-75.51	287.81			0.00	
2600.00	14.69	195.21	2563.68	-302.20	-82.17	313.17	0.00	0.00		
2700.00	14.69	195.21	2660.41	-326.68	-88.82	338.54	0.00	0.00	0.00	
2800.00	14.69	195.21	2757.13	-351.15	-95.48	363.90	0.00	0.00	0.00	
2900.00	14.69	195.21	2853.86	-375.63	-102.13	389.27	0.00	0.00	0.00	
3000.00	14.69	195.21	2950.59	-400.10	-108.79	414.63	0.00	0.00	0.00	
			3047.32	-424.58	-115.44	440.00	0.00	0.00	0.00	
3100.00	14.69	195.21	3144.05	-449.06	122.10	465.36	0.00	0.00	0.00	
3200.00	14.69	195.21			-128.75	490.72	0.00	0.00	0.00	
3300.00	14.69	195.21	3240.78	-473.53	*120.7J	450.12	0.00	0.00		
3400.00	14.69	195.21	3337.51	-498.01	-135.41	516.09	0.00	0.00 0.00	0.00 0.00	
3500.00	14.69	195.21	3434.24	-522.48	-142.06	541.45	0.00			
3600.00	14.69	195.21	3530.97	-546.96	··148.72	566.82	0.00	0.00	0.00	
3700.00	14.69	195.21	3627.70	-571.44	··155.37	592.18	0.00	0.00	0.00	TOD 0
3754.07	14.69	195.21	3680.00	-584.67	··158.97	605.89	0.00	0.00	0.00	TGR 3
3800.00	14.69	195.21	3724.43	-595.91	··162.03	617.55	0.00	0.00	0.00	
3900.00	14.69	195.21	3821.16	-620.39	-168.68	642.91	0.00	0.00	0.00	
		195.21	3917.89	-644.86	··175.34	668.27	0.00	0.00	0.00	
4000.00	14.69			-669.34	-181.99	693.64	0.00	0.00	0.00	
4100.00 4200.00	14.69 14.69	195.21 195.21	4014.62 4111.35	-693.81	··188.65	719.00	0.00	0.00	0.00	
						744 27	0.00	0.00	0.00	
4300.00	14.69	195.21	4208.08	-718.29	··195.30	744.37				
4400.00	14.69	195.21	4304.81	-742.77	201.96	769.73	0.00	0.00	0.00	
4500.00	14.69	195.21	4401.54	-767.24	-208.61	795.10	0.00	0.00	0.00	DOLLOLAS OPEEN
4555.27	14.69	195.21	4455.00	-780.77	-212.29	809.11	0.00	0.00	0.00	DOUGLAS CREEK
4600.00	14.69	195.21	4498.27	-791.72	215.27	820.46	0.00	0.00	0.00	
4700.00	14.69	195.21	4595.00	-816.19	-221.92	845.83	0.00	0.00	0.00	
4800.00	14.69	195.21	4691.73	-840.67	-228.58	871.19	0.00	0.00	0.00	
		195.21	4788.46	-865.14	235.23	896.55	0.00	0.00	0.00	
4900.00	14.69	195.21	4885.19	-889.62	241.89	921.92	0.00	0.00	0.00	
5000.00 5100.00	14.69 14.69	195.21	4981.92	-914.10	-248.54	947.28	0.00	0.00	0.00	
0 100.00	14.00	.00,21	.50,.02							
5200.00	14.69	195.21	5078.65	-938.57	-255.20	972.65	0.00	0.00	0.00	B. 10/ 01/11 E 11/2/2
5237.58	14.69	195.21	5115.00	-947.77	-257.70	982.18	0.00	0.00	0.00	BLACK SHALE MARKE
5300.00	14.69	195.21	5175.38	-963.05	-261.85	998.01	0.00	0.00	0.00	
5400.00	14.69	195.21	5272.11	-987.52	-268.51	1023.38	0.00	0.00	0.00	
5500.00	14.69	195.21		-1012.00	-275.16	1048.74	0.00	0.00	0.00	
	44.60	105.04	5200.00	-1017.35	-276.62	1054.29	0.00	0.00	0.00	CASTLE PEAK
5521.88	14.69	195.21		-1017.33	-270.02 -281. <b>8</b> 2	1074.11	0.00	0.00	0.00	
5600.00	14.69	195.21			-286.33	1091.30	0.00	0.00	0.00	DROP
5667.80	14.69	195.21		-1053.07					0.00	
5700.00	14.21	195.21		-1060.82	-288.44	1099.34	1.50	-1.50		
5800.00	12.71	195.21	5659.58	-1083.29	-294.54	1122.61	1.50	-1.50	0.00	
5900.00	11.21	195.21		-1103.28	-299.98	1143.34	1.50	-1.50	0.00	
6000.00	9.71	195.21		-1120.80	-304.74	1161.49	1.50	-1.50	0.00	
6100.00	8.21	195.21	5954.52	-1135.83	-308.83	1177.07		-1.50	0.00	
6150.95	7.45	195.21		-1142.53	-310.65	1184.01	1.50	-1.50	0.00	WASATCH
6200.00	6.71	195.21		-1148.36	-312.24	1190.05	1.50	-1.50	0.00	
6300.00	5.21	195.21	6153 13	-1158.38	-314.96	1200.43	1.50	-1.50	0.00	
				-1165.88	-317.00	1208.21	1.50	-1.50	0.00	
6400.00	3.71	195.21				1211.73		-1.50	0.00	TOP OF TGT
6462.28	2.78	195.21		-1169.28	-317.93			-1.50	0.00	. 5. 6 6.
6500.00	2.21	195.21		-1170.87	-318.36	1213.37			0.00	
6600.00	0.71	195.21	6452.65	-1173.32	-319.03	1215.92	1.50	-1.50	0.00	
6647.35	0.00	195.21		-1173.61	-319.10	1216.22		-1.50	0.00	HOLD
6700.00	0.00	195.21	6552.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
6800.00	0.00	195.21		-1173.61	-319.10	1216.22	0.00	0.00	0.00	

## Weatherford International, Ltd. PLAN REPORT

Field:

Company: BILL BARRETT CORP

DUCHESNE COUNTY, UTAH #16-28-46 DLB

Site:

#16-28-46 DLB

Date: 4/25/2007 Co-ordinate(NE) Reference:

Vertical (TVD) Reference:

Survey Calculation Method:

Section (VS) Reference:

Time: 17:15:00

Site: #16-28-46 DLB, True North

Page:

SITE 7267.7

Minimum Curvature

Well (0.00N,0.00E,195.21Azi)

Db: Sybase

3

Well: Wellpath: 1

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	IE/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
6900.00	0.00	195.21	6752.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7000.00	0.00	195.21	6852.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7100.00	0.00	195.21	6952.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7200.00	0.00	195.21	7052.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7300.00	0.00	195.21	7152.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7400.00	0.00	195.21	7252.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7500.00	0.00	195.21	7352.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7600 00	0.00	195.21	7452.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7600.00 7700.00	0.00	195.21	7552.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7800.00	0.00	195.21	7652.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
7900.00	0.00	195.21	7752.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
8000.00	0.00	195.21	7852.65		-319.10	1216.22	0.00	0.00	0.00	
	0.00	405.04	7915.00	-1173.61	-319.10	1216.22	0.00	0.00	0.00	NORTH HORN
8062.35	0.00	195.21	7915.00	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
8100.00	0.00	195.21	8052.65	-1173.61	319.10	1216.22	0.00	0.00	0.00	
8200.00	0.00	195.21	8152.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
8300.00 8400.00	0.00 0.00	195.21 195.21	8252.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
	0.00	195.21	8352.65	-1173.61	··319.10	1216.22	0.00	0.00	0.00	
8500.00	0.00	195.21	8452.65	-1173.61	319.10	1216.22	0.00	0.00	0.00	
8600.00	0.00	195.21	8552.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
8700.00	0.00	195.21	8652.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
8800.00			8752.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	
8900.00	0.00	195.21	0/02.00	-1173.01	-519,10					
9000.00	0.00	195.21	8852.65	-1173.61	-319.10	1216.22	0.00	0.00	0.00	DD111 40 00 40
9037.35	0.00	195.21	8890.00	-1173.61	-319.10	1216.22	0.00	0.00	0.00	PBHL_16-28-46

Annotation	ı
------------	---

Annotation			
MD ft	TVD ft		
1000.00 1734.66	1000.00 1726.63 5531.15	KOP HOLD DROP	
5667.80 6462.28 6647.35	6315.00 6500.00	TOP OF TGT HOLD	
9037.35	8890.00	PBHL	

#### Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	< Latitude> Deg Min Sec	C Longitude> Deg Min Sec
PBHL_16-28-46 -Circle (Radius			8890.00	-1173.61	-319.10	7206069.491	1903139.63	40 5 55.321 N	110 33 38.907 W

## Surface Use Plan for Bill Barrett Corporation's Development Program Lake Canyon Area Duchesne County, Utah

#### 1. Existing Roads:

The Lake Canyon area is located approximately 12 miles southwest of Duchesne, Utah and extends from Township 3 South, Range 10 West to Township 5 South, Range 6 West. The specific location of a particular well pad will be shown on maps and described in the site specific APD.

The use of Skitzy Road is necessary to access the area. Improvements to Skitzy Road and other existing access roads will be noted in the site specific APD's.

## 2. Planned Access Roads:

Descriptions of new access road(s) will be included in the site specific APD.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advanced with the UDWR

# 3. <u>Location of Tank Batteries, Production Facilities, and Production Gathering</u> And Service Lines:

The following guidelines will apply if the well is productive:

All permanent (on site for six months or longer) structures constructed or installed will conform to DOGM standards. All facilities will be painted within six months of installation.

A containment dike will be constructed completely around production facilities which contain fluids (i.e., production tanks, produced water tanks). This dike will be constructed of compacted subsoil, be impervious, and hold a minimum of 110% of the capacity of the largest tank. Topsoil will not be used for the construction of dike(s).

A description of the proposed pipeline and a map illustrating the proposed route will be submitted with the well site specific APD.

#### 4. Location and Type of Water Supply

The Duchesne City Culinary Water Dock located in section 1, T4S-R5W will be used for water supply for drilling and completion operations. Additional water supply sources will be addressed in the site specific APD, indicating the location and type of water supply.

#### 5. Source of Construction Materials:

All construction materials for this location site and access road shall be borrowed (local) material accumulated during construction of the location site and access road. No construction materials will be removed from UDWR lands. If any gravel is used, it will be obtained from an approved gravel pit.

## 6. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including any salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be used at the next drill site or will be removed and disposed of at an approved waste disposal facility within 180 days after drilling is terminated. Immediately upon well completion, any hydrocarbons in the pit shall be removed.

Unless otherwise specified in the site specific APD, the reserve pit will be constructed on the location and will not be located within natural drainages, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not allow discharge of liquids.

If it is determined, at the onsite, that a pit liner is necessary, the reserve pit will be lined with a synthetic reinforced liner a minimum of 12-millimeters thick. The liner will overlay a felt-liner pad if rock that might tear or puncture the liner is encountered during excavation. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. Trash, scrap pipe, etc. that could puncture the liner will not be disposed of in the pit. Pit walls will be sloped no greater than 2:1. A minimum 2-foot freeboard will be maintained in the pit at all times during the drilling and completion operations. The pit liner will be protected during drilling and completion operations.

Production fluids will be contained in leak-proof tanks. All production fluids will be sold, recycled, or disposed of at approved disposal sites.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical self-contained sanitary-toilet will be onsite during drilling and completions.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. Trash will not be burned on location.

All debris and other waste materials not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The reserve pit fencing will be on three sides before drilling operations start. The fourth side will be fenced as soon as drilling is completed and the rig is removed. The fencing will be maintained until such time as the pits are backfilled.

## 7. Ancillary Facilities:

Garbage containers and portable toilets are the only ancillary facilities proposed. No additional ancillary facilities are foreseen in the future.

#### 8. Wellsite Layout:

A location layout diagram describing drill pad cross-sections, cuts and fills, and locations of mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and the surface materials stockpile(s) will be included with the site specific APD and developed through a consultant.

## 9. Plans for Restoration of the Surface:

The dirt contractor will be provided with an approved copy of the surface use plan and these Standard Operating Procedures prior to commencing construction activities.

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production. All reclamation standards will be developed between Bill Barrett Corporation (BBC) and UDWR. Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions may include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and the re-establishment of vegetation as specified.

All disturbed areas will be re-contoured to the approximate natural contours.

Any drainage rerouted during the construction activities shall be restored as near

as possible to its original line of flow.

Prior to backfilling the reserve pit, the fence surrounding the reserve pit will be removed. The pit liner will be cut off at the water or mud line and disposed of at an approved landfill site. The remaining liner will be torn and perforated after the pit dries and prior to backfilling the reserve pit.

Before any dirt work associated with reserve pit restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations. The reserve pit will be reclaimed within 180 days from the date of well completion, weather permitting, unless it is determined that this location will be utilized to drill additional wells within 1 year of completing operations.

After the reserve pit has been reclaimed, diversion ditches and water bars will be used to divert precipitation runon/runoff as appropriate.

Prior to the construction of the location, the top 6 inches or maximum available topsoil material will be stripped and stockpiled. Placement of the topsoil will be noted on the location plat attached to the site specific APD. Topsoil shall be stockpiled separately from subsoil materials. Topsoil salvaged from the reserve pit shall be stockpiled separately near the reserve pit. When all drilling and completion activities have been completed, the unused portion of the location (area outside the deadmen) will be recontoured and the stockpiled topsoil spread over the area.

If topsoil must be stored for more than one year:

It shall be windrowed on the uphill side of the location to prevent any possible contamination. All topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination.

It shall be broadcast seeded with the prescribed seed mixture immediately after windrowing. Seed will be drilled on the contour to an appropriate depth and the stockpile then "walked" with a dozer to cover the seed and roughen the soil to prevent erosion.

Mulching may be considered to enhance the re-establishment of desired native plant communities. If straw or hay mulch is used, the straw and hay must be certified to be weed-free and the documentation submitted prior to usage.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas, including the old access road will be scarified and left with a rough surface.

UDWR shall be contacted for the required seed mixture. Seed will be drilled on

the contour to an appropriate depth. If broadcast seeded, the amount of seed mixture per acre will be doubled, and a harrow or some other implement will be dragged over the seeded area to assure coverage of the seeds.

At final abandonment, BBC will follow UT-DOGM standards for final well abandonment.

#### 10. Other Information:

The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished to the BBC field representative to ensure compliance.

The operator will control noxious weeds along applied access road authorizations, pipeline route authorizations, well sites or other applicable facilities

Wells drilled during the fire season (June – October) all appropriate precautions shall be instituted to ensure that fire hazard is minimized, including, but not limited to, controlling vegetation and keeping fire fighting equipment readily available during all drilling and completion operations.

Drilling rigs and/or equipment used during drilling operations on locations will not be stacked or stored on UDWR administered lands after the conclusion of drilling operations or at any other time without permission by the UDWR. If UDWR permission is obtained, such storage will only be temporary measure.

Travel will be restricted to approved travel routes.

## 11. CERTIFICATION

Reed Haddock Bill Barrett Corporation 1099 18<sup>th</sup> Street, Suite 2300 Denver, CO 80202

Phone: 303-312-8546 Fax: 303-291-0420

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Bill Barrett Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Good Haddock

DATE: February 27, 2007

Reed Haddock Permit Analyst

## 12. Bill Barrett Corporation and UDWR Contacts:

#### BBC Representatives:

Reed Haddock, Regulatory and Permitting; Phone: (303) 312-8546 Scot Donato, Environmental Health and Safety; Phone: (303) 312-8191 Monty Shed, Field Operations; Phone: (307) 262-1511

## **UDWR** Representatives:

Ben Williams, UDWR, Wildlife Resources; Phone: (435) 781-5357 Bill James, UDWR, Wildlife Resources, Manager; Phone: (801) 538-4745

## **BILL BARRETT CORPORATION**

#16-28-46 DLB

LOCATED IN DUCHESNE COUNTY, UTAH SECTION 28, T4S, R6W, U.S.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

**CAMERA ANGLE: NORTHEASTERLY** 

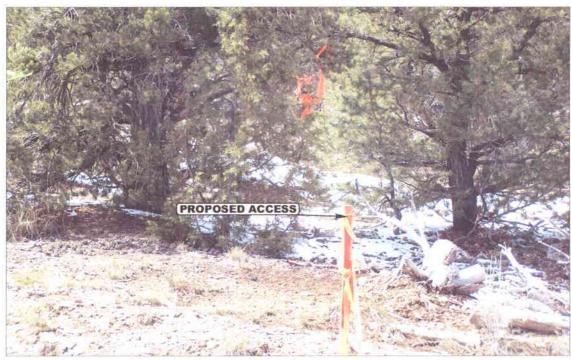
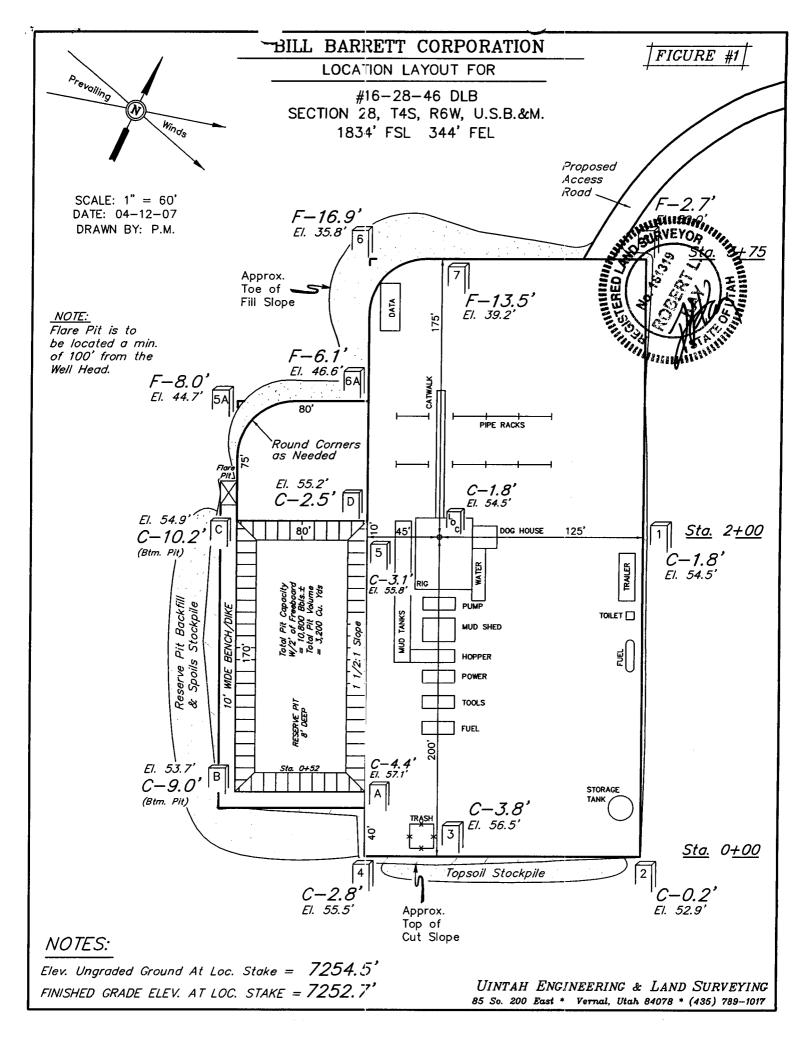


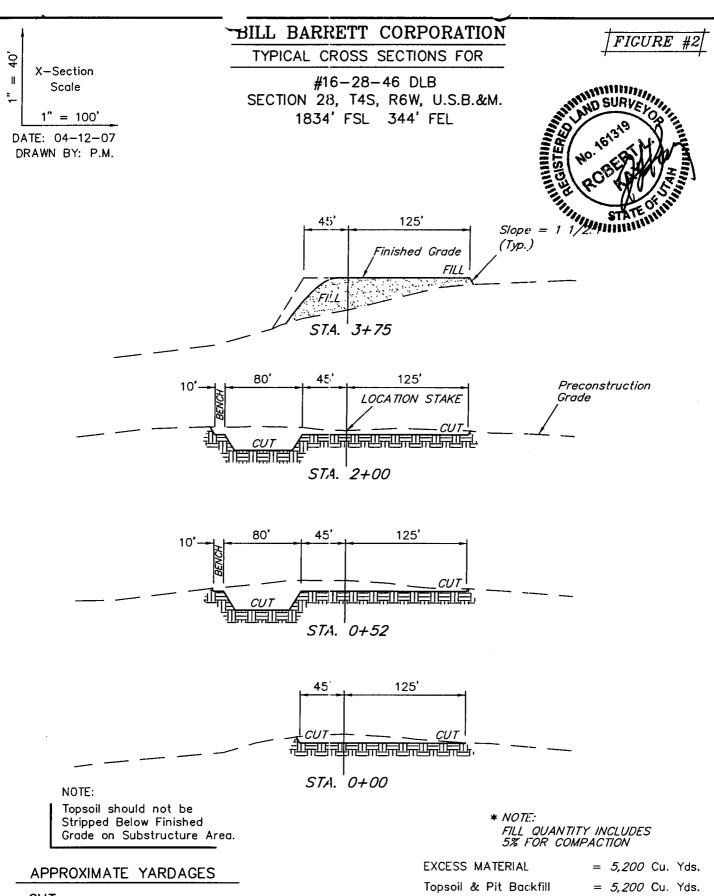
PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

**CAMERA ANGLE: SOUTHWESTERLY** 



TOPOG R M A	A P H I C	04 MONTH	18 DAY	07 YEAR	РНОТО
TAKEN BY: D.S.	DRAWN BY: C.P	REVISED: 00-00-00			





CUT

(12") Topsoil Stripping = 3,600 Cu. Yds. Remaining Location = 8,000 Cu. Yds.

TOTAL CUT = 11,600 CU.YDS.

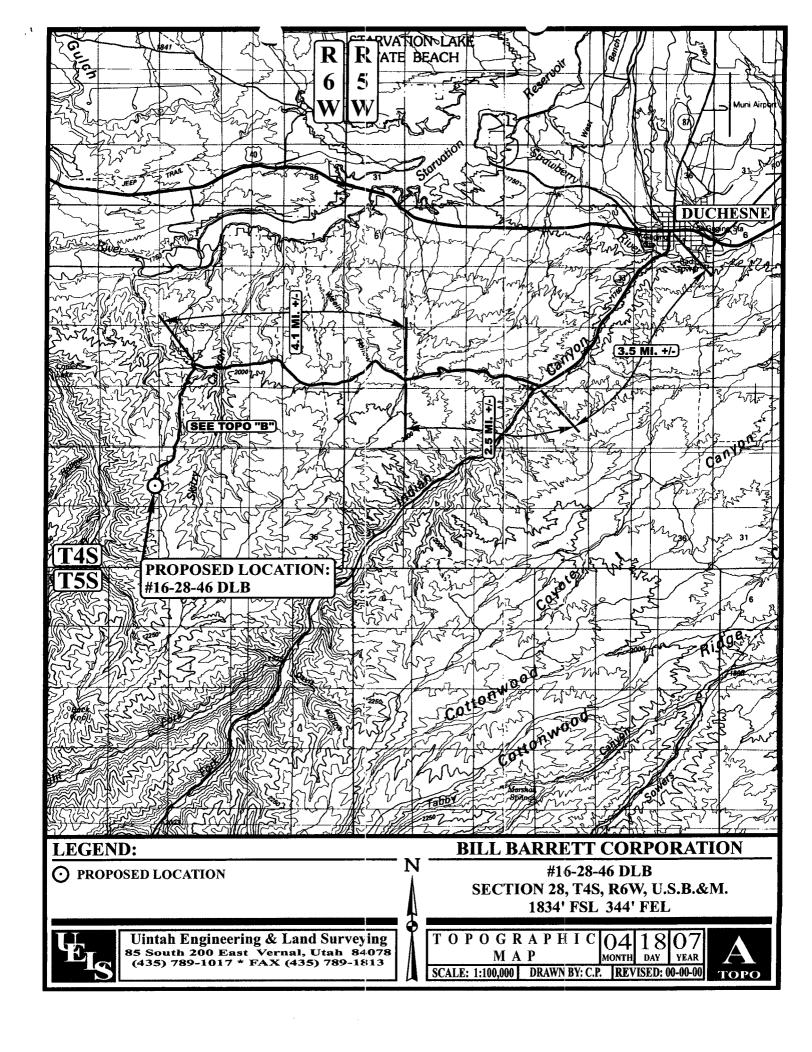
FILL = 6,400 CU.YDS.

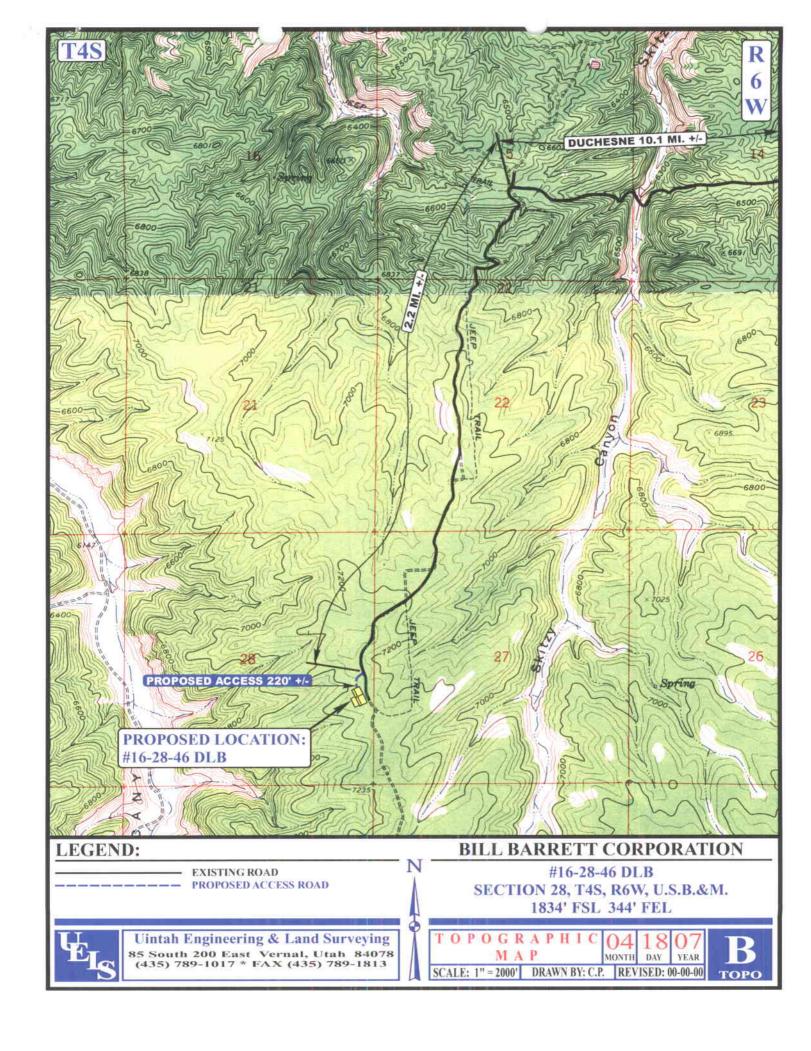
(1/2 Pit Vol.)

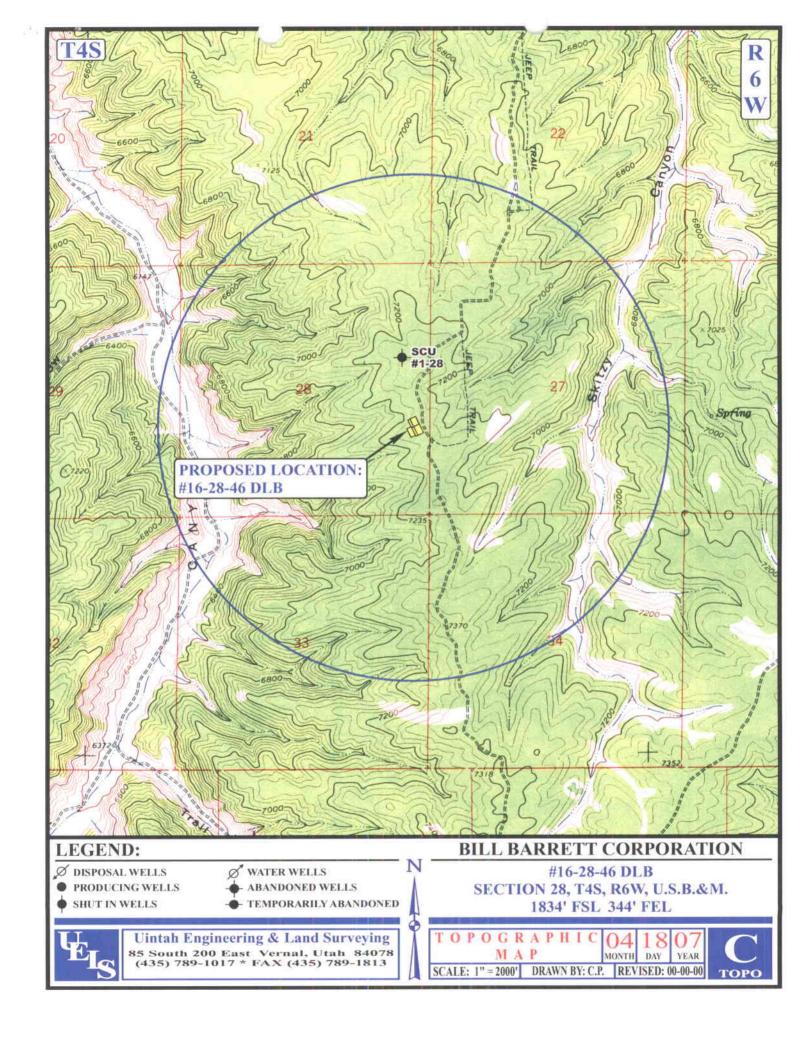
= 0 Cu. Yds.

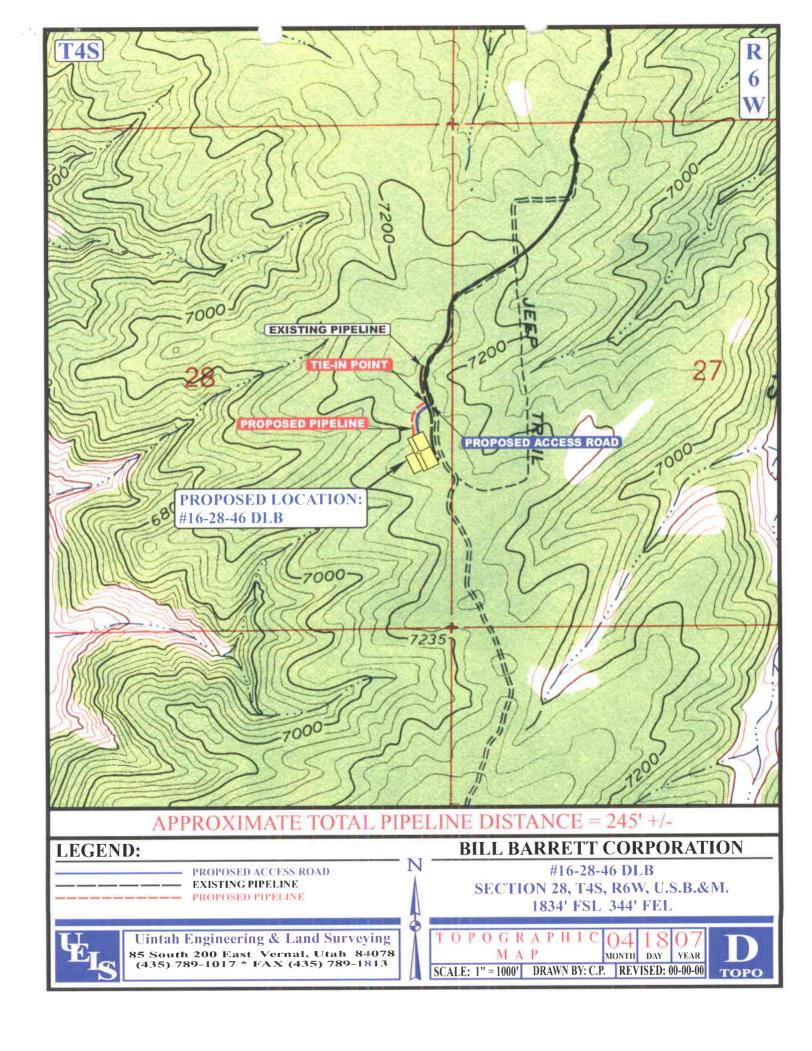
EXCESS UNBALANCE = (After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017









## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVE	D: 04/30/2007		API NO. ASSIG	NED: 43-013	-33631
WELL NAME •	16-28-46 DLB				
	BILL BARRETT CORP ( N.2165 )		PHONE NUMBER:	303-312-854	6
	REED HADDOCK				
PROPOSED LO	CATION:		INSPECT LOCATN	BY: /	/
	28 040S 060W 1834 FSL 0344 FEL		Tech Review	Initials	Date
	0660 FSL 0660 FEL		Engineering		
	DUCHESNE		Geology		
	40.10199 LONGITUDE: -110.5591 EASTINGS: 537580 NORTHINGS: 44389	60	Surface		
	IE: ALTAMONT ( 55			, <u>l</u>	
LEASE NUMBE	2 - Indian CR: 14-20-H62-5500 NER: 2 - Indian		PROPOSED FORMAT		RN
Plat Bond:	ND/OR REVIEWED: Fed[] Ind[2] Sta[] Fee[] WYB000040 )	R	ON AND SITING: 649-2-3.		
Water	Shale 190-5 (B) or 190-3 or 190-13		649-3-2. Gener iting: 460 From 09 649-3-3. Excep	tr/Qtr & 920' E	etween Wells
	MUNICIPAL ) Review (Y/N) te: )		rilling Unit Board Cause No:		
,	Surf Agreement (Y/N)		Eff Date: Siting:		
	nt to Commingle (Y/N)	,	.649-3-11. Dire	ectional Dri	11
COMMENTS: _					
STIPULATION	NS: 1- Coun apron	0			
			· · · · · · · · · · · · · · · · · · ·		

**T4S R6W** SKITZY CYN UTE 1-22-2A SKITZY CANYON UTE 4-22-1A **ALTAMONT FIELD** SKITZY CANYON UTE 3-22-IC SKITZY CANYON UTE 2-22-2C BHL 7-21-16 DLB 22 F I-20-3A 7-21-46 DLB SKITZY CYN UTE 21 1-21-3A TRIBAL 16-21-46 BHL 14-21-46 DLB LC TRIBAL 14-22D-46 BHL 16-21-46 DLB ВН • 14-22D-46 14-21-46 16-21-46 DLB DI.B LC TRIBAL 4-27-46 5-27-46 DLB 7-28-46 DLB LC TRIBAL 8-28-46 SKITZY CYN UTE 1-28-2C 7-29-46 DLB BHL 5-28-46 DLB 5-28-46 DLB BHIL \*\*\*
7-28-46 DLB BHIL (\*) SKITZY CYN UTE 3-29-2C 27 SKITZY CYN UTE 1-27-4B 16-28-46 DLB • BHL 🏵 16-28-46 DLB UTE TRIBAL **OPERATOR: BILL BARRETT CORP (N2165)** SEC: 21,28 T.4S R. 6W **FIELD: ALTAMONT (55) COUNTY: DUCHESNE** Wells Status SPACING: R649-3-11 / DIRECTIONAL DRILLING Utah Oil Gas and Mining **GAS INJECTION** GAS STORAGE LOCATION ABANDONED NEW LOCATION Unit Status

EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PENDING Field Status **PLUGGED & ABANDONED** ■ ABANDONED PRODUCING GAS PRODUCING OIL ACTIVE **SHUT-IN GAS** COMBINED SHUT-IN OIL ■ INACTIVE TEMP. ABANDONED PI OIL PROPOSED **TEST WELL** PP GAS STORAGE **WATER INJECTION** PP GEOTHERML Δ TERMINATED PP OIL WATER SUPPLY PREPARED BY: DIANA MASON SECONDARY WATER DISPOSAL DATE: 7-MAY-2007

DRILLING

TERMINATED



#### Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA Division Director JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

May 7, 2007

Bill Barrett Corporation 1099 18th St., Ste. 2300 Denver, CO 80202

Re: 16-28-46 DLB Well, Surface Location 1834' FSL, 344' FEL, NE SE, Sec. 28, T. 4 South, R. 6 West, Bottom Location 660' FSL, 660' FEL, SE SE, Sec. 28,

T. 4 South, R. 6 West, Duchesne County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-33631.

Sincerely,

Gil Hunt

Associate Director

pab Enclosures

cc: Duchesne County Assessor

Bureau of Land Management, Vernal Office

Operator:	Bill Bar	rett Corporation	
Well Name & Number	16-28-4	6 DLB	
API Number:	43-013-		
Lease:	14-20-H		
Surface Location: NE SE  Bottom Location: SE SE	Sec. 28 Sec. 28	T. 4 South T. 4 South	<b>R.</b> 6 West R. 6 West
Bottom Escation. BE SE	Conditions of Approval		

**Conditions of Approval** 

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
- 6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Form	3	160	-3
(Apri	1	200	4)

RECEIVED | VERHAL FIELD OFFICE

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

UNITED STATES	
DEPARTMENT OF THE INTERIOR 2007 APR 30	PM
BUREAU OF LAND MANAGEMENT	

1 5. Lease Serial No.

BUREAU OF LAND MAN	INTERIOR ZOUT AT IT JU	rn I	5 9BIA 14-20-H62-55	DO
APPLICATION FOR PERMIT TO	DRILL OR REENTER TH	IE INTE	6. If Indian, Allotee or T	ribe Name
	BUREAU OF	ANDE	11 • 645 1	
la. Type of work:  DRILL  REENTE	ER		7 If Light or CA Agreemen	nt, Name and No.
lb. Type of Well: ☐Oil Well    Gas Well ☐Other	✓ Single Zone Multi	ple Zone	8. Lease Name and Well # 16-28-46 DLB	No.
2 Name of Operator BILL BARRETT CORPORATION			9. API Well No.  Pending 43-6	013-336
3a. Address 1099 18th Street, Suite 2300 Denver CO 80202	3b. Phone No. (include area code) (303) 312-8546		10. Field and Pool, or Explo Altamont	oratory
4. Location of Well (Report location clearly and in accordance with an	ry State requir <del>em</del> ents.*)		11. Sec., T. R. M. or Blk. an	d Survey or Area
At surface NESE, 1834' FSL, 344' FEL  At proposed prod. zone SESE, 660' FSL, 660' FEL			Section 28-T4S-R6	W U.S.B.&M.
			12. County or Parish	13. State
<ol> <li>Distance in miles and direction from nearest town or post office*         ApproxImately 12.3 miles southwest of Duchesne, Utah     </li> </ol>			Duchesne	UT
15. Distance from proposed* location to nearest	16. No. of acres in lease	17. Spacin	g Unit dedicated to this well	
property or lease line, ft. (Also to nearest drig. unit line, if any) 344' SHL; 660' BHL	N/A	40		
18. Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth		BLM/BIA Bond No. on file Nationwide Bond #WYB000040	
applied for, on this lease, ft. 1,450' abandoned well	9537' MD	Natio	nwide Bond #W 1 Buuuu4	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7254' ungraded ground	22. Approximate date work will sta 07/01/2007	ırt*	23. Estimated duration 45 days	
	24. Attachments			
The following, completed in accordance with the requirements of Onshor	re Oil and Gas Order No.1, shall be a	ttached to th	is form:	
Well plat certified by a registered surveyor.     A Drilling Plan.			ns unless covered by an exist	ing bond on file (see
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be flied with the appropriate Forest Service Office).	Lands, the 5. Operator certification 5. Such other site authorized office.	specific info	ormation and/or plans as may	be required by the
25. Signature 1000 Haddock	Name (Printed Typed) Reed Haddock		Date	04/27/2007
Title Permit Analyst				
Approved by (Signature)	Name (Printed Typed)	KA	Date	-5-2007
Title Assistant Field Manager	Office VERNAL	TELD (	<b>FFICE</b>	
Lande & Mineral Recourage	4.50			
Application approval does not warrant or certify that the applicant hold conduct operations thereon.  Conditions of approval, if any, are attached.	s legal or equitable-title to those righ	nts in the sub	ject lease which would entitle	the applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr	rime for any person knowingly and to any matter within its jurisdiction.	willfully to m	nake to any department or ago	ency of the United

\*(Instructions on page 2)

RECEIVED JUN 1 3 2007 DIV. OF OIL, GAS & MINING

UDO611)



## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL, UT 84078

(435) 781-4400



#### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:

**Bill Barrett Corporation** 

Location:

NESE, Sec. 28, T4S, R6W

Well No:

16-28-46 DLB

Lease No:

BIA 14-20-H62- 5500

API No: 43-013 - 33631 Agre

Agreement: N/A

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
NRS/Enviro Scientist:	Paul Buhler	(435) 781-4475	(435) 828-4029
NRS/Enviro Scientist:	Karl Wright	(435) 781-4484	•
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	
NRS/Enviro Scientist:	Melissa Hawk	(435) 781-4476	(435) 828-7381
NRS/Enviro Scientist:	Chuck MacDonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Jannice Cutler	(435) 781-3400	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	
		Fax: (435) 781-4410	

### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### **NOTIFICATION REQUIREMENTS**

Construction Activity	-	The Ute Tribe Energy & Minerals Dept. shall be notified in writing 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)		Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)		Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 6 Well: 16-28-46 DLB

6/1/2007

#### SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### General Conditions of Approval

- A <u>184.43' by 30'</u> foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations should be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel should refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department should be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

#### Additional Conditions of Approval

• Paint tanks Olive Black.

Page 3 of 6 Well: 16-28-46 DLB

6/1/2007

#### **DOWNHOLE COAs:**

#### SITE SPECIFIC DOWNHOLE COAs:

- Use 1" tubing to cement top 100 feet of surface casing with class G neat cement (1.18 cubic feet per sack).
- 5M BOPE shall be required, when drilling out surface casing shoe. The 5M BOPE shall meet all requirements of Onshore Order #2 including testing requirements.
- The top of the production casing cement shall extend a minimum of 200 feet above the 9 5/8 inch surface casing shoe.
- All casing strings below the conductor shall be pressure tested to 0.22 psi/ft or 1500 psi, whichever is greater, but not to exceed 70% of the internal yield strength of the casing.

A formation integrity test shall be performed at the 9 5/8 inch casing shoe after drilling 20 feet or less.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the
  daily drilling report. Components shall be operated and tested as required by Onshore Oil &
  Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be
  performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be
  reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.

Page 4 of 6 Well: 16-28-46 DLB 6/1/2007

The operator must report all shows of water or water-bearing sands to the BLM. If flowing water
is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM
Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a
  weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is
  completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 5 of 6 Well: 16-28-46 DLB

6/1/2007

#### **OPERATING REQUIREMENT REMINDERS:**

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written
  communication and must be received in this office by not later than the fifth business day
  following the date on which the well is placed on production. The notification shall provide, as a
  minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will
  be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be
  reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major
  Events" will be reported in writing within 15 days. "Minor Events" will be reported on the
  Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

Page 6 of 6 Well: 16-28-46 DLB

6/1/2007

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
  and all future meter proving schedules. A copy of the meter calibration reports shall be
  submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API
  standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
  measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
  to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs
  first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
  adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
  sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior
  approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
  days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
  before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

		FORM 9		
	I	DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: BIA 14-20-H62-5500	
	SUNDRY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE INDIAN TRIBE		
Do	not use this form for proposals to drill n drill horizontal la	ew wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to sterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT OF CA AGREEMENT NAME:  N/A	
1. ⊤	(PE OF WELL OIL WELL	GAS WELL 🗹 OTHER	8. WELL NAME and NUMBER: # 16-28-46 DLB	
	AME OF OPERATOR: LL BARRETT CORPOF		9. API NUMBER: 4301333631	
109	DDRESS OF OPERATOR: 19 18TH Street, Ste 2300 CIT	PHONE NUMBER: (303) 312-8546	10. FIELD AND POOL, OR WILDCAT: ALTAMONT	
	DOTAGES AT SURFACE: 1834'	FSL x 344' FEL	COUNTY: DUCHESNE	
Q	TR/QTR, SECTION, TOWNSHIP, RAN	GE, MERIDIAN: NESE 28 T4S R6W	STATE: UTAH	
11.	CHECK APP	ROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA	
	TYPE OF SUBMISSION	TYPE OF ACTION		
<b>/</b>	NOTICE OF INTENT (Submit in Duplicate)	ACIDIZE DEEPEN  ALTER CASING FRACTURE TREAT	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL	
	Approximate date work will start:	CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON TUBING REPAIR	
		CHANGE TO PREVIOUS PLANS OPERATOR CHANGE  CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE	
П	SUBSEQUENT REPORT	CHANGE TUBING PLUG AND ABANDON  CHANGE WELL NAME PLUG BACK	WATER DISPOSAL	
	(Submit Original Form Only)	CHANGE WELL STATUS PRODUCTION (START/RESUME)	WATER SHUT-OFF	
	Date of work completion:		✓ OTHER: APD EXTENSION	
		CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	OTHER: AT D EXTENSION	
12.	DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volum	es, etc.	
		RATION (BBC) REQUESTS A ONE-YEAR EXTENSION ON THE PROVED ON MAY 7, 2007 AND EXPIRES MAY 7, 2008.	APD FOR THIS LOCATION. THE	
		Approved by the Utah Division of Oil, Gas and Mining		
		Date: 05-06-08  By:	COPY SENT TO OPERATOR  Date: 5-7-2008  Initiate: KS	

(This space for State use only)

NAME (PLEASE PRA

REED HADDOCK

RECEIVED MAY 0 6 2008

PERMIT ANALYST

DATE \_\_\_5/1/2008

### Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

API:

4301333631

Well Name: 16-28-46 DLB Location: 1834' FSL, 344' FEL, NESE, SEC. 28, T4S, R6W Company Permit Issued to: BILL BARRETT CORPORATION Date Original Permit Issued: 5/7/2007
The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.
Following is a checklist of some items related to the application, which should be verified.
If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes □ No ☑
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes□No☑
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes□No☑
Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes□No ☑
Has the approved source of water for drilling changed? Yes□No☑
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes□No☑
Is bonding still in place, which covers this proposed well? Yes ☑No ☐
Signature S/1/2008  Date
Title: PERMIT ANALYST
Representing: BILL BARRETT CORPORATION RECEIVED

DIV. OF OIL, GAS & MINING

MAY 0 6 2008

#### STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

DIVISION OF OIL, GAS AND MINING				l .	designation and serial number: 4-20-H62-5500		
SUNDRY NOTICES AND REPORTS ON WELLS					AN, ALLOTTEE OR TRIBE NAME:		
					NDIAN TRIBE  CA AGREEMENT NAME:		
	new wells, significantly deepen existing wells below curn aterals. Use APPLICATION FOR PERMIT TO DRILL fo			N/A			
1. TYPE OF WELL OIL WELL	GAS WELL 🗸 OTHER _				IAME and NUMBER: 8-46 DLB		
2. NAME OF OPERATOR:	24.710.1			9. API NUI			
BILL BARRETT CORPOR  3. ADDRESS OF OPERATOR:	ATION		PHONE NUMBER:	43013	AND POOL, OR WILDCAT:		
1099 18TH Street, Ste 2300 CITY	P Denver STATE CO ZIP	80202	(303) 312-8168		MONT		
4. LOCATION OF WELL  FOOTAGES AT SURFACE: 1834' F  QTR/QTR, SECTION, TOWNSHIP, RANGE	The state of the s	₹ <b>6W</b>		COUNTY:	DUCHESNE		
CHECK ADD	DODDIATE DOVES TO INDICAT	T NATURE	OF NOTICE BEDO	DT OR			
	ROPRIATE BOXES TO INDICAT			KI, UK	OTHER DATA		
TYPE OF SUBMISSION	ACIDIZE	DEEPEN	YPE OF ACTION	☐ RI	EPERFORATE CURRENT FORMATION		
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	FRACTURE	TREAT	=	DETRACK TO REPAIR WELL		
Approximate date work will start:	CASING REPAIR		TRUCTION		EMPORARILY ABANDON		
	CHANGE TO PREVIOUS PLANS	OPERATOR	R CHANGE		JBING REPAIR		
	CHANGE TUBING	PLUG AND	ABANDON	□ v	ENT OR FLARE		
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	<	□ w	ATER DISPOSAL		
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTI	ON (START/RESUME)	_ w	ATER SHUT-OFF		
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMAT	ION OF WELL SITE	<u>Z</u> •	THER: APD EXTENSION		
	CONVERT WELL TYPE	RECOMPLE	ETE - DIFFERENT FORMATION	_			
12. DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all p	pertinent details in	cluding dates, depths, volum	es, etc.			
	RATION (BBC) REQUESTS AN A IAL APD WAS APPROVED ON M KPIRES ON MAY 6, 2009.						
Approved by the Utah Division of Oil, Gas and Mining							
Date: 5.12.2009 Initials: 45							
NAME (PLEASE PRINT) Matt Barb	per		Permit Analyst				
SIGNATURE Matt B	alu	DA	4/30/2009				
					······································		

(This space for State use only)

RECEIVED MAY 0 6 2009



#### Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

Well Name: Location: Company Peri	4301333631 #16-28-46 DLB 1834' FSL, 344' FE mit Issued to: Permit Issued:	Bill Barrett Co	, T4S-R6W rporation			
above, hereby	ed as owner with verifies that the cation to drill, re	information a	s submitte	d in the prev	iously	ted
Following is a coverified.	checklist of some	e items relate	d to the ap	<u>plication, wh</u>	ich shou	id be
•	ivate land, has t en updated? Yes		changed,	if so, has the	e surface	!
•	been drilled in t siting requireme	•	• •		h would	affect
	n any unit or othe peration of this p	_			d affect tl	ne
	en any changes could affect the p			_	ship, or ri	ight-
Has the approv	ved source of wa	iter for drilling	g changed?	' Yes□No☑	3	
	en any physical o ire a change in p s⊟No⊠	-				ute
ls bonding still	in place, which	covers this pr	oposed we	il? Yes ☑ No	) <del> </del>	
Matt C. Signature	Bull			4/30/2009 Date	· · · · · · · · · · · · · · · · · · ·	
Title: Permit Ar	nalyst	<del></del>				
Representing: -	Bill Barrett Corpo	ration			I	DEOEN /==
					i	RECEIVED

MAY 0 6 2009

### United States Department of the Interior



BUREAU OF LAND MANAGEMENT Green River District-Vernal Field Office 170 South 500 East Vernal, UT 84078 (435) 781-4400 Fax: (435) 781-4410 http://www.blm.gov/ut/st/en/fo/vernal.html

IN REPLY REFER TO: 3160 UTG011

August 6, 2009

Matt Barber Bill Barrett Corporation 1099 18<sup>th</sup> Street, Suite 2300 Denver, CO 80202

43 013 33631

Re:

Notice of Expiration Well No. 16-28-46 DLB NESE, Sec. 28, T4S, R6W Duchesne County, Utah Lease No. 14-20-H62-5500

Dear Mr. Barber:

The Application for Permit to Drill for the above-referenced well was approved on June 5, 2007. No extension of the original APD was requested. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you that the approval of the referenced application has expired. If you intend to drill at this location in the future, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

If you have any questions regarding this matter, please contact me at (435) 781-3428.

Sincerely,

Robin R. Hansen

Legal Instruments Examiner

CC:

UDOGM BIA Ute Tribe

RECEIVED SEP 15 2009

DIV. OF OIL, GAS & MINING

	STATE OF UTAH		FORM 9			
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-5500			
SUND	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE					
Do not use this form for proposition-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME:					
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: 16-28-46 DLB			
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43013336310000			
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300, E	Denver, CO, 80202 303 31	PHONE NUMBER: 2-8128 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 28	IP, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian: U	J	STATE: UTAH			
11. CHE	CK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR			
NOTICE OF INTENT Approximate date work will start: 5/6/2010	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
3,0,2010	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	L DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION			
	OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK			
SPUD REPORT	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION			
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON			
	☐ TUBING REPAIR ☐ WATER SHUTOFF		WATER DISPOSAL  ✓ APD EXTENSION			
DRILLING REPORT Report Date:						
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:			
As per conversation Tracey Fallang (B granted an additional	As per conversation between Brad Hill (DOGM Permitting Manager) and Tracey Fallang (BBC Permit Specialist) on May 6, 2010, BBC has been granted an additional year extension on the APD for this location. The original APD was approved on May 7, 2007. The previous permit extension expires on May 7, 2010.  Date:  May 10, 2010					
	By: Dagall					
NAME (PLEASE PRINT) Matt Barber	<b>PHONE NUMBER</b> 303 312-8168	TITLE Permit Analyst				
SIGNATURE	202 21Z <u>-</u> 0100	DATE				
N/A		5/6/2010				



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013336310000

**API:** 43013336310000 Well Name: 16-28-46 DLB

Location: 1834 FSL 0344 FEL QTR NESE SEC 28 TWNP 040S RNG 060W MER U

Company Permit Issued to: BILL BARRETT CORP

**Date Original Permit Issued: 5/7/2007** 

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the requ

information	n as submitted n. Following is	in the previ	ously approved appl of some items relate	ication to dril d to the appli	l, remains cation, wh	valid and does nich should be ve	ot rified.
		d, has the o No	ownership changed,	if so, has the	surface a	greement been	
	wells been dri quirements for		vicinity of the propos n? 问 Yes 📵 No	sed well which	h would af	fect the spacing	or
	e been any unit oposed well? (		greements put in pla No	ce that could	affect the	permitting or op	eration
	re been any ch e proposed loca		e access route includ Yes 📵 No	ling ownershi	ip, or right	tof- way, which c	ould
• Has the a	approved sourc	e of water f	or drilling changed?	( Yes	No		
			ges to the surface lo cussed at the onsite				a a
• Is bondir	ng still in place,	which cove	ers this proposed we	ell? 🌘 Yes	No U	pproved by the tah Division of Gas and Minir	
<b>nature:</b> Ma	att Barber	Date:	5/6/2010			3.6 10 2010	
<b>Title:</b> Pe	rmit Analyst <b>Rep</b>	resenting:	BILL BARRETT CORP		Date:_	May 10, 2010	
					Bv: D	00091	

Sig

		FORM 9	
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-5500
	RY NOTICES AND REPORTS (		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	sals to drill new wells, significantly deepen e igged wells, or to drill horizontal laterals. Us		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: 16-28-46 DLB		
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43013336310000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , D		E NUMBER: -8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 28	P, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian: U		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF  WILDCAT WELL DETERMINATION  MPLETED OPERATIONS. Clearly show all perticing submitted to correct the least 14-20-H62-6109.	ase number on file to  A  Coil	CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION OTHER: Correct Lease Number  Columes, etc.  ACCEPTED by the Utah Division of I, Gas and Mining RECORD ONLY
NAME (PLEASE PRINT) Tracey Fallang	<b>PHONE NUMBER</b> 303 312-8134	<b>TITLE</b> Regulatory Manager	
SIGNATURE N/A		<b>DATE</b> 3/18/2011	

Form 3160-3 (August 2007)

### APD PMT RCVD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 12 2010

FORM APPROVED OMB No. 1004-0136 Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. 1420H626109

APPLICATION FOR PERMIT	TO DRILL OR REENTER	6. If Indian, Allottee or Tribe UINTAH AND OURA	
1a. Type of Work: ☑ DRILL ☐ REENTER		7. If Unit or CA Agreement,	Name and No.
	ner Single Zone Multiple Zone  ELAINE WINICK  @billbarrettcorp.com	8. Lease Name and Well No. 16-28-46 DLB  9. API Well No.	43-013-33631
3a. Address	3b. Phone No. (include area code)	10 Field and David and French	
1099 18TH STREET SUITE 2300 DENVER, CO 80202	Ph: 303-312-8168	10. Field and Pool, or Explor ALTAMONT	ratory
4. Location of Well (Report location clearly and in according	ance with any State requirements.*)	11. Sec., T., R., M., or Blk. a	and Survey or Area
At surface NESE 1834FSL 344FEL		Sec 28 T4S R6W Me	er UBM
At proposed prod. zone SESE 660FSL 660FEL			
14. Distance in miles and direction from nearest town or post 12.3 MILES SW OF DUCHESNE, UT	office*	12. County or Parish DUCHESNE	13. State
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Acres in Lease	17. Spacing Unit dedicated t	o this well
660'	619.35	40.00	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on t	file
2610'	7500 MD 7284 TVD		
21. Elevations (Show whether DF, KB, RT, GL, etc. 7254 GL	22. Approximate date work will start 05/11/2011	23. Estimated duration 65 DAYS (D&C)	
	24. Attachments		
The following, completed in accordance with the requirements o	f Onshore Oil and Gas Order No. 1, shall be attached to	this form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Off</li> </ol>	Item 20 above). em Lands, the 5. Operator certification	ons unless covered by an existing	`
25. Signature (Electronic Submission)	Name (Printed/Typed) ELAINE WINICK Ph: 303-312-8168		Date 10/07/2010
Title SENIOR PERMIT ANALYST			
Approved by (Signature)	Name (Printed/Typed)  Jerry Kenczka		MAR 1 6 2011
My Hough	0		
Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFIC	F	
Application approval does not warrant or certify the applicant ho	lds legal or equitable title to those rights in the subject le	ase which would entitle the app	olicant to conduct
	TIONS OF APPROVAL ATTACHED		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, 1 States any false, fictitious or fraudulent statements or representat	make it a crime for any person knowingly and willfully t ions as to any matter within its jurisdiction.	make to any department or ago	ency of the United

Additional Operator Remarks (see next page)

NOTICE OF APPROVAL

Electronic Submission #94263 verified by the BLM Well Information System
For BILL BARRETT CORPORATION, sent to the Vernal
Committed to AFMSS for processing by ROBIN HANSEN on 10/20/2010 (11RRH0246AE)

MAR 2 9 2011

DIV. OF OIL, GAS & MINING



\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*



#### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE**

**VERNAL, UT 84078** 

(435) 781-4400



#### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

Bill Barrett Corporation

16-28-46 DLB

API No: 43-013-33631 Location:

NESE, Sec. 28, T4S, R6W

Lease No: Agreement: 14-20-H62-6109

N/A

**OFFICE NUMBER:** 

(435) 781-4400

**OFFICE FAX NUMBER: (435) 781-3420** 

#### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### **NOTIFICATION REQUIREMENTS**

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	_	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut vn opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 7 Well: 16-28-46 DLB

3/9/2011

#### SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- A 184.43' by 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- The operator will strictly adhere to all Stipulations and Conditions of Approval associated with the Lake Canyon Environmental Assessment for the location.
- A qualified Archeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy and Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The company shall assure the Ute Tribe that "ALL CONTRACTORS INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC," have acquired a current and valid Ute Tribal business license and have "Assess Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's, COAs, and ROWs applications the operator will notify the Ute Tribe in writing and will receive written authorization of any such change with appropriate authorization.
- The operator will implement "Safety and Emergency Plan." The operator's safety director will ensure its compliance.
- All operator employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's, ROW permits/authorizations, and COAs on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel shall refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe/BIA shall be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.

Page 3 of 7 Well: 16-28-46 DLB

3/9/2011

• Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy and Minerals Department, so that Tribal Technician can verify Affidavit of Completion.

• All production facilities shall be painted Olive Black to blend in with the surrounding vegetation.

Page 4 of 7 Well: 16-28-46 DLB

3/9/2011

#### DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

- Production casing cement shall be brought up and into the surface casing. The minimum cement top is 200 ft above the surface casing shoe.
- Oil (or Diesel) shall not be used in the water based mud system without prior approval. Written request for approval shall be required.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the
  daily drilling report. Components shall be operated and tested as required by Onshore Oil &
  Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be
  performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be
  reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water
  is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM
  Vernal Field Office.

Page 5 of 7 Well: 16-28-46 DLB

3/9/2011

• The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum
   Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well: 16-28-46 DLB

3/9/2011

#### **OPERATING REQUIREMENT REMINDERS:**

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at <a href="https://www.ONRR.gov">www.ONRR.gov</a>.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written
  communication and must be received in this office by not later than the fifth business day
  following the date on which the well is placed on production. The notification shall provide, as a
  minimum, the following informational items:
  - o Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

Page 7 of 7 Well: 16-28-46 DLB

3/9/2011

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
  and all future meter proving schedules. A copy of the meter calibration reports shall be
  submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API
  standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
  measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
  to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs
  first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
  adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
  sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior
  approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
  days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
  before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Sundry Number: 14243 API Well Number: 43013336310000

	STATE OF UTAH	0-0	FORM 9			
	DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-6109			
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE			
Do not use this form for proposition-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME:					
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: 16-28-46 DLB			
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43013336310000			
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , D		ONE NUMBER: 312-8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 28	IP, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian	: U	STATE: UTAH			
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT	, OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	CHANGE WELL NAME			
5/7/2011	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION			
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK			
	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON			
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL			
DRILLING REPORT	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION			
Report Date:	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:			
		·	,			
BBC is requesting a o previous conversation	12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  BBC is requesting a one year extension to this APD that expires 5/7/2011. Per previous conversations had between Tracey Fallang of BBC and Brad Hill, an extension may be granted on this APD due to the fact that federal authority approval was recently received.  Approved by the Utah Division of Oil, Gas and Mining					
		ı	Date: 04/14/2011			
		1	By: balyll			
			20			
NAME (PLEASE PRINT)	PHONE NUMBER	R   TITLE				
Brady Riley	303 312-8115	Permit Analyst				
SIGNATURE N/A		<b>DATE</b> 4/8/2011				

Sundry Number: 14243 API Well Number: 43013336310000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013336310000

**API:** 43013336310000 **Well Name:** 16-28-46 DLB

Location: 1834 FSL 0344 FEL QTR NESE SEC 28 TWNP 040S RNG 060W MER U

Company Permit Issued to: BILL BARRETT CORP

**Date Original Permit Issued: 5/7/2007** 

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

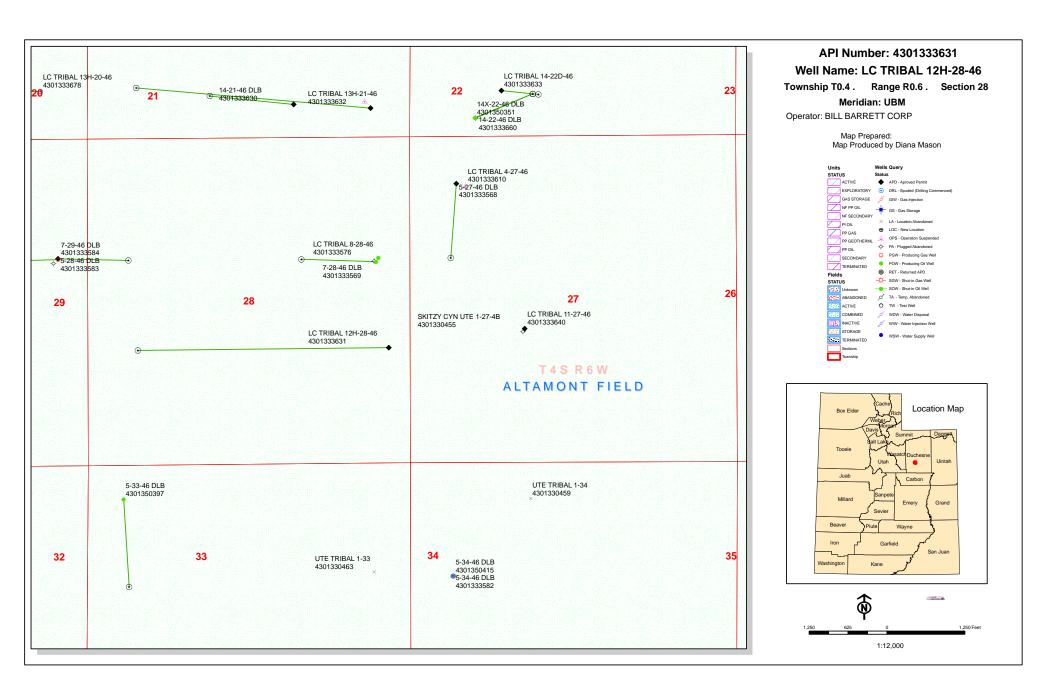
<ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been updated?</li> <li>Yes </li> <li>No</li> </ul>
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed? 🔵 Yes 🌘 No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No

**Signature:** Brady Riley **Date:** 4/8/2011

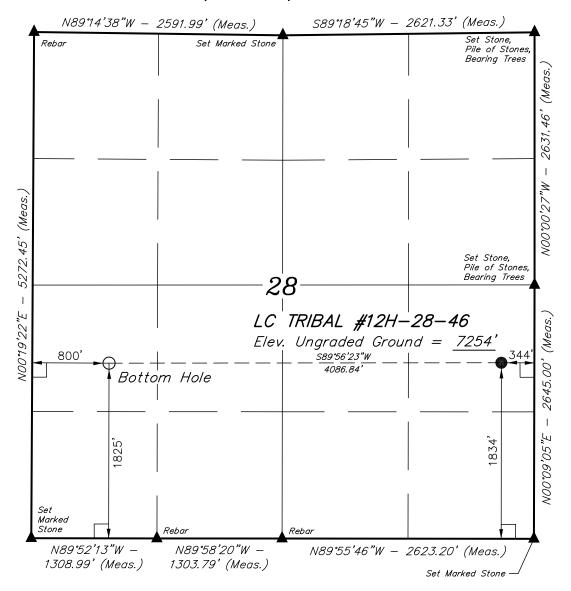
Title: Permit Analyst Representing: BILL BARRETT CORP

Sundry Number: 14249 API Well Number: 43013336310000

			FORM		
	STATE OF UTAH		FORM 9		
	5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-6109				
SUNDI	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE				
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	7.UNIT or CA AGREEMENT NAME:				
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: 16-28-46 DLB				
2. NAME OF OPERATOR: BILL BARRETT CORP	9. API NUMBER: 43013336310000				
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , I		DNE NUMBER: 12-8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NESE Section: 28	IP, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian:	U	STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPORT,	OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	☐ ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	✓ CHANGE WELL NAME		
7/1/2011	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION		
Date of Work Completion:	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK		
	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON		
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL		
DRILLING REPORT	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	APD EXTENSION		
Report Date:	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:		
12 DESCRIBE PROPOSED OF CO	OMDI ETED OPERATIONS. Clearly show all no	rtinent details including dates, denths	<u></u>		
This sundry is being requested to change the name to the LC Tribal 12H-28-46. BBC is also requesting permission to change this well from a directional well to a horizontal well. New plat, drilling plan, directional plan, one mile radius map, and Horizontal Letter are attached. Distance to nearest lease line is 345' to the NE and the distance to the nearest well is 3403' to the SE. Please contact Brady Riley at 303-312-8115 with questions in regard to the changes.  By:    By:					
NAME (PLEASE PRINT) Brady Riley SIGNATURE	<b>PHONE NUMBER</b> 303 312-8115	Permit Analyst  DATE			
N/A		4/8/2011			



### T4S, R6W, U.S.B.&M.



#### BILL BARRETT CORPORATION

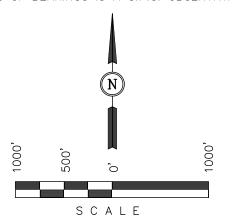
Well location, LC TRIBAL #12H-28-46, located as shown in the NE 1/4 SE 1/4 of Section 28, T4S, R6W, U.S.B.&M., Duchesne County, Utah.

#### BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET.

#### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE RT WAS REFERED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER THE SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELLET NO. 161319

RESTRATION NO. 181319

REVISED: 02-18-11

# UINTAH ENGINEERING & LAND SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017

#### LEGEND:

 $_{-}$  = 90° SYMBOL

● = PROPOSED WELL HEAD.

= SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)		
LATITUDE = 40°06'06.78" (40.101883) LONGITUDE = 110°34'27.37" (110.574269)	LATITUDE = 40'06'06.92" (40.101922) LONGITUDE = 110'33'34.80" (110.559667)	F	
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)	L	
LATITUDE = $40^{\circ}06'06.93''$ ( $40.101925$ )	LATITUDE = $40^{\circ}06'07.07''$ ( $40.101964$ )	٦w	

DATE SURVEYED: SCALE DATE DRAWN: 1" = 100004 - 10 - 0704-12-07 REFERENCES PARTY D.S. J.A. P.M. G.L.O. PLAT WEATHER FILE COOL BILL BARRETT CORPORATION Sundry Number: 14249 API Well Number: 43013336310000

#### **DRILLING PLAN**

#### BILL BARRETT CORPORATION

LC Tribal 12H-28-46

SHL: NESE, 1834' FSL, 344' FEL, Section 28-T4S-R6W BHL: NWSW, 1825' FSL & 800' FWL, Section 28-T4S-R6W Duchesne Co., UT

Bill Barrett Corporation (BBC) intends to drill a horizontal through the prospective zone within the Uteland Butte.

### 1 - 3. <u>Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals</u>

#### HORIZONTAL FORMATION TOPS

Formation	Depth – MD	Depth - TVD
Surface casing	1000'	1000'
Green River	1952'	1952'
Mahogany	2527'	2527'
TGR3	3677'	3677'
Douglas Creek	4477'	4477'
Black Shale	5247'	5247'
KOP	5270'	5270'
Castle Peak	5471'	5467'
Uteland Butte	5915'	5787'
(Penetration Point)		
CR1	6036'*	5827'
Landing Point	6189'	5842'
TD (CR1)	9684'	5722'

<sup>\*</sup>PROSPECTIVE PAY

#### 4. <u>Casing Program</u>

	Hole	SETTING DEPTH		Casing	Casing	Casing		
	<u>Size</u>	(FROM)	(TO)	Size	Weight	Grade	<b>Thread</b>	Condition
	12-1/4"	surface	1,000'	9 5/8"	36.0 ppf	J or K 55	ST&C	New
	8 3/4"	1000'	5000'	7"	23.0 ppf	P-110	LT&C	New
Γ	6 1/4"	5000'	TD'	4 1/2	11.6 ppf	P-110	LT&C	New
				Liner				

The Uteland Butte/CR1 is the primary objective for oil/gas.

Drilling Plan LC Tribal 12H-28-46 Duchesne Co., UT

### 5. <u>Cementing Program</u>

9 5/8" Surface Casing	Cement with approximately 480 sx Premium Plus – Type III cement with additives mixed at 14.8 ppg (yield = 1.35 ft <sup>3</sup> /sx), calculated hole volume with 100% excess. <i>Top out cement</i> , if required: 100 sx of Premium cement with additives mixed at 15.8 ppg (yield = 1.17 ft <sup>3</sup> /sk)
7" Intermediate Casing	Lead with approximately 215 sx HOWCO Light Premium cement with additives, mixed at 11.0 ppg (yield = 3.14 ft <sup>3</sup> /sx).  Tail with approximately 280 sx Halliburton 50/50 POZ Premium cement with additives mixed at 13.5 ppg (yield = 1.46 ft <sup>3</sup> /sx).  Planned TOC = 1000° above the KOP (tail).
4 ½" Liner	No cement will be used in this section. Swell packers or Packers Plus (or equivalent) will be run to isolate the production hole from the intermediate casing section.

Note: Top of Tail cement for the intermediate string will be calculated to 1000' above the KOP using gauge hole plus 50% excess. Lead to surface.

### 6. <u>Mud Program</u>

<u>Interval</u>	Weight	<u>Viscosity</u>	Fluid Loss (API filtrate)	<u>Remarks</u>
40' - 1,000'	8.4 - 8.8	26 - 36	NC	Freshwater Spud Mud Fluid
				System
1,000' - 3000'	8.9 - 9.2	26 - 36	NC	Fresh Water with sweeps
3000' – 5000'	9.2 - 9.4	42 - 55	6 – 10	Fresh Water PHPA
5000' - TD	9.0 - 9.2	45 - 58	4 – 10	Fresh Water PHPA

Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.

Drilling Plan LC Tribal 12H-28-46 Duchesne Co., UT

### 7. BOP and Pressure Containment Data

Depth Intervals	BOP Equipment						
0 - 1,000	No pressure control required						
1,000' – TD	11" 5000# Ram Type BOP						
	11" 5000# Annular BOP						
- Drilling spool to accommodate choke and kill lines;							
- Ancillary and cho	ke manifold to be rated @ 5000 psi;						
- Ancillary equipme	ent and choke manifold rated at 5,000#. All BOP and BOPE tests will be in						
accordance with the	he requirements of onshore Order No. 2;						
- The BLM and the	State of Utah Division of Oil, Gas and Mining will be notified 24 hours in						
advance of all BOP pressure tests.							
- BOP hand wheels	- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up						
to operate most ef	ficiently in this manner.						

### 8. Auxiliary Equipment

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

### 9. Testing, Logging and Core Programs

Cores	None anticipated;					
Testing	None anticipated; drill stem tests may be run on shows of interest;					
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;					
Surveys	MWD as needed to land wellbore;					
Logging	DIL-GR-SP, FDC-CNL-GR-CALIPER-Pe-Microlog, Sonic-GR (all TD to surface).					
	FMI & Sonic Scanner to be run at geologist's discretion.					
Note: All open hole logs would be run on the proposed "pilot hole" portion of the wellbore. FMI						
and CAL may	be run on the lateral portion of the horizontal wellbore at the geologist's discretion.					

#### 10. Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4633 psi\* and maximum anticipated surface pressure equals approximately 2503 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

\*Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

#### 11. Location and Type of Water Supply

Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W.

<sup>\*\*</sup>Maximum surface pressure = A - (0.22 x TD)

Drilling Plan LC Tribal 12H-28-46 Duchesne Co., UT

### 12. Drilling Schedule

Location Construction: Constructed 6/23/2011

Spud: Conductor Casing Spud 7/7/2011

Surface Casing Spud Date Approx. 9/1/2011

Duration: 25 days drilling time

25 days completion time

Well name:

LC Tribal 12H-28-46

Operator:

BBC

String type:

Surface

Location:

Utah

Design parameters: Collapse Mud weight:	9.000 ppg	Minimum design Collapse: Design factor	factors:	Environment: H2S considered? Surface temperature: 75 °F		
Design is based on eva	cuated pipe.	Burst:	4.00	Bottom hole temperature Temperature gradient: Minimum section length: Minimum Drift:	: 89 °F 1.40 °F/100ft 1,000 ft 8.750 in	
Ruret		Design factor	1.00	Cement top:	-0 ft	
Burst May anticipated surface						
Max anticipated surface						
pressure:	377 psi					
Internal gradient:	0.220 psi/ft	<u>Tension:</u>		Non-directional string.		
Calculated BHP	597 psi	8 Round STC:	1.80 (J)	3		
		8 Round LTC:	1.80 (J)			
Annular backup:	9.50 ppg	Buttress:	1.60 (J)			
		Premium:	1.50 (J)			
				Do as for the state		
		Body yield:	1.50 (B)	Re subsequent strings:		
				Next setting depth:	4,730 ft	
		Tension is based on air weight.		Next mud weight:	9.000 ppg	
		Neutral point:	867 ft	Next setting BHP:	2,212 psi	
				Fracture mud wt:	11.500 ppg	
				Fracture depth:	1,000 ft	

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	10 <b>00</b>	9.625	36.00	K-55	ST&C	1000	1000	8.765	71.2
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load	Tension Strength	Tension Design
1	467	2020	4.321	377	3520	9.33	<b>(Kips)</b> 36	( <b>Kips)</b> 423	<b>Factor</b> 11.75 J

Bill Barrett

Date: February 17,2011 Denver, Colorado

Injection pressure

597 psi

Remarks:

Collapse is based on a vertical depth of 1000 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

LC Tribal 12H-28-46

Operator:

**BBC** 

String type:

Intermediate

Location:

Utah

Collaps Mud	n <b>paramete</b> se weight: gn is based		9.200 ppg ed pipe.	Collapse:	Minimum design factors: Collapse: Design factor 1.125			Environment: H2S considered? Surface temperature: Bottom hole temperature: Temperature gradient: Minimum section length: 1,000 ft		
Burst Max	anticipated:	surface		Burst: Design fac	ctor	1.00	Minimum Dr		1,000 ft 6.250 in	
р	ressure: nal gradient	•	1,220 psi 0.220 psi/ft	Tension:	Tension:			Directional well information:		
	ulated BHP		2,261 psi	8 Round S	STC:	1.80 (J)	Kick-off poir	nt	4253 ft	
				8 Round L	.TC:	1.80 (J)	Departure a		487 ft	
Annı	ular backup:		9.50 ppg	Buttress: 1.60 (J)			3 3		12 °/100ft	
				Premium:		1.50 (J)	Inclination a		91.2 °	
				Body yield	l <b>:</b>	1.50 <b>(</b> B)		uent strings		
				Tanaian ia	based on air	woight		ting depth:	4,658 ft	
				Neutral po		4,076 ft	Next mud weight: 9.000 ppg Next setting BHP: 2,178 psi			
				Neutral po	mit.	4,070 11		mud wt:	14.000 ppg	
								Fracture depth: 4,730 ft		
								pressure	3,440 psi	
							,	p. 5555.5	o, po.	
Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal	
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Capacity	
•	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(ft³)	
1	5013	` 7	23.00	S-95	LT&C	4730	5013	6.25	231.7	
				A						
Run	Collapse	Collapse	Collapse	/ Burst	Burst	Burst	Tension	Tension	Tension	
Seq	Load	Strength	Design	/ Load	Strength	Design	Load	Strength	Design	
	(psi)	(psi)	Factor /	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor	
1	2261	5268	2.330 L	1220	<b>75</b> 30	6.17	109	512	4.71 J	
				/						

Note! Will actually run HCP-110. Casing design did not have correct strength values.

Bill Barrett

Date: February 18,2011 Denver, Colorado

#### Remarks:

Collapse is based on a vertical depth of 4730 ft, a mud weight of 9.2 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

LC Tribal 12H-28-46

Operator:

**BBC** 

String type:

Production

Location:

Utah

Design parameters:

Collapse

Mud weight:

9.000 ppg

Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor

1.125

**Environment:** 

H2S considered?

Surface temperature: Bottom hole temperature:

75 °F 140 °F

No

Temperature gradient:

1.40 °F/100ft

Minimum section length: 1,500 ft

**Burst:** 

Design factor

1.00

1.80 (J)

1.80 (J)

Cement top:

3,210 ft

**Burst** 

Max anticipated surface

pressure: Internal gradient: Calculated BHP

1,153 psi 0.220 psi/ft 2,178 psi

Annular backup: 9.50 ppg Tension:

8 Round STC: 8 Round LTC:

Buttress: Premium:

1.60 (J) 1.50 (J) Body yield: 1.50 (B)

Directional well information:

Kick-off point Departure at shoe:

4253 ft 3697 ft 12 °/100ft

Maximum dogleg: Inclination at shoe:

91.29°

Tension is based on air weight. Neutral point: 4,031 ft

Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Capacity (ft³)
• 1	82 <b>23</b>	4.5	11.60	P-110	LT&C	4658	8223	3.875	190.6
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor
1	2178	7580	3.481	1153	10690	9.27	54	279	5.16 J

Date: February 18,2011 Denver, Colorado

Bill Barrett

Remarks:

Collapse is based on a vertical depth of 4658 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

# **Bill Barrett Corp**

Duchesne County, UT (NAD 1927) Sec. 28-T4S-R6W LC Tribal #12H-28-46

Plan A Rev 0

Plan: Plan A Rev 0 Proposal

# Sperry Drilling Services Proposal Report

25 March, 2011

Well Coordinates: 645,570.26 N, 2,263,231.45 E (40° 06' 07.07" N, 110° 33' 32.24" W)

Ground Level: 7,253.00 ft

Local Coordinate Origin:

Centered on Well LC Tribal #12H-28-46

Viewing Datum:

RKB 24' @ 7277.00ft (H&P 319)

TVDs to System:

North Reference:

Unit System:

API - US Survey Feet - Custom

Geodetic Scale Factor Applied Version: 2003.16 Build: 43I

**HALLIBURTON** 

### **HALLIBURTON**

### Plan Report for LC Tribal #12H-28-46 - Plan A Rev 0 Proposal

0.00	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
200.00 0.00 0.00 200.00 0.00 0.00 0.00											
\$300.00											
\$00.00 0.00 0.00 400.00 0.00 0.00 0.00 0											
\$60.00											
600.00											
700.00											
800.00 0.00 0.00 800.00 0.00 0.00 0.00											
1,000.00						0.00					
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TGR3           3,700.00         0.00         3,700.00         0.00											
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Douglas Creek           4,500.00         0.00         4,500.00         0.00											
4,500.00       0.00       0.00       4,500.00       0.00 <td></td> <td></td> <td>0.00</td> <td>4,477.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>			0.00	4,477.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00       0.00       0.00       4,700.00       0.00 <td>_</td> <td></td> <td>0.00</td> <td>4,500.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	_		0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00       0.00       0.00       4,700.00       0.00 <td>4,600.00</td> <td>0.00</td> <td>0.00</td> <td>4,600.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00 0.00 0.00 4,900.00 0.00 0.00 0.00 0.00 0.00 0.00											
	4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### **HALLIBURTON**

### Plan Report for LC Tribal #12H-28-46 - Plan A Rev 0 Proposal

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00 5,200.00 5,247.00 Black Sha	0.00 0.00 0.00	0.00 0.00 0.00	5,100.00 5,200.00 5,247.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
5,269.51 <b>Kickoff at</b>	0.00	0.00	5,269.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	3.05	269.81	5,299.99	0.00	-0.81	0.81	10.00	10.00	0.00	269.81
5,350.00 5,400.00 5,450.00 5,471.14 Castle Pea	8.05 13.05 18.05 20.16	269.81 269.81 269.81 269.81	5,349.74 5,398.87 5,447.03 5,467.00	-0.02 -0.05 -0.10 -0.12	-5.65 -14.80 -28.20 -35.11	5.65 14.80 28.20 35.11	10.00 10.00 10.00 10.00	10.00 10.00 10.00 10.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
5,500.00	23.05 e = <b>10.00°/100</b>	269.81 <b>ft</b>	5,493.83	-0.16	-45.74	45.74	10.00	10.00	0.00	0.00
5,550.00	28.05	269.81	5,538.93	-0.23	-67.30	67.30	10.00	10.00	0.00	0.00
5,600.00 5,650.00	33.05 38.05	269.81 269.81	5,581.98 5,622.64	-0.31 -0.41	-92.70 -121.77	92.70 121.77	10.00 10.00	10.00 10.00	0.00 0.00	0.00 0.00
5,700.00	43.05	269.81	5,660.62	-0.52	-154.26	154.26	10.00	10.00	0.00	0.00
5,750.00	48.05	269.81	5,695.63	-0.64	-189.94	189.94	10.00	10.00	0.00	0.00
5,800.00	53.05	269.81	5,727.39	-0.78	-228.54	228.54	10.00	10.00	0.00	0.00
5,850.00 5,900.00	58.05 63.05	269.81 269.81	5,755.66 5.780.24	-0.92 -1.06	-269.75 -313.28	269.76 313.28	10.00 10.00	10.00 10.00	0.00 0.00	0.00 0.00
5,915.32	64.58	269.81	5,787.00	-1.11	-327.03	327.03	10.00	10.00	0.00	0.00
5,950.00	n Point (Utela 68.05	269.81	5,800.93	Penetration -1.22	-358.78	358.78	10.00	10.00	0.00	0.00
6,000.00	73.05	269.81	5,817.57	-1.38	-405.91	405.91	10.00	10.00	0.00	0.00
6,036.09 <b>CR1</b>	76.66	269.81	5,827.00	-1.50	-440.74	440.75	10.00	10.00	0.00	0.00
6,050.00	78.05	269.81	5,830.05	-1.54	-454.31	454.32	10.00	10.00	0.00	0.00
6,100.00	83.05	269.81	5,838.25	-1.71	-503.62	503.62	10.00	10.00	0.00	0.00
6,150.00	88.05	269.81	5,842.13	-1.88	-553.45	553.46	10.00	10.00	0.00	0.00
6,189.21 Fnd Build	91.97 at 6189.21 ft -	269.81	5,842.12	-2.01	-592.66	592.66	10.00	10.00	0.00	0.00
6,200.00	91.97	269.81	5,841.75	-2.05	-603.44	603.44	0.00	0.00	0.00	0.00
6,300.00	91.97	269.81	5,838.32	-2.39	-703.38	703.38	0.00	0.00	0.00	0.00
6,400.00	91.97	269.81	5,834.88	-2.73	-803.32	803.32	0.00	0.00	0.00	0.00
6,500.00 Hold Angle	91.97 e at <b>91.97</b> °	269.81	5,831.44	-3.07	-903.26	903.27	0.00	0.00	0.00	0.00
6,600.00	91.97	269.81	5,828.00	-3.41	-1,003.20	1,003.21	0.00	0.00	0.00	0.00
6,700.00	91.97	269.81	5,824.56	-3.75	-1,103.14	1,103.15	0.00	0.00	0.00	0.00
6,800.00	91.97	269.81	5,821.13	-4.08	-1,203.08	1,203.09	0.00	0.00	0.00	0.00
6,900.00	91.97	269.81	5,817.69	-4.42	-1,303.02	1,303.03	0.00	0.00	0.00	0.00
7,000.00	91.97	269.81	5,814.25	-4.76	-1,402.96	1,402.97	0.00	0.00	0.00	0.00
7,100.00 7,200.00	91.97 91.97	269.81 269.81	5,810.81 5,807.38	-5.10 -5.44	-1,502.90 -1,602.84	1,502.91 1,602.85	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
7,300.00	91.97	269.81	5,803.94	-5.44 -5.78	-1,702.78	1,702.79	0.00	0.00	0.00	0.00
7,400.00	91.97	269.81	5,800.50	-6.12	-1,802.72	1,802.73	0.00	0.00	0.00	0.00
7,500.00 <b>269.81° A</b> z	91.97	269.81	5,797.06	-6.46	-1,902.66	1,902.67	0.00	0.00	0.00	0.00
7,600.00 7,700.00	91.97 91.97	269.81 269.81	5,793.63 5,790.19	-6.80 -7.14	-2,002.60 -2,102.54	2,002.62 2,102.56	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
7,800.00	91.97	269.81	5,786.75	-7.14 -7.48	-2,102.34	2,702.50	0.00	0.00	0.00	0.00
7,900.00	91.97	269.81	5,783.31	-7.82	-2,302.42	2,302.44	0.00	0.00	0.00	0.00
8,000.00	91.97	269.81	5,779.88	-8.16	-2,402.36	2,402.38	0.00	0.00	0.00	0.00
8,100.00	91.97	269.81	5,776.44	-8.50	-2,502.31	2,502.32	0.00	0.00	0.00	0.00
8,200.00 8,300.00	91.97 91.97	269.81 269.81	5,773.00 5,769.56	-8.84 -9.17	-2,602.25 -2,702.19	2,602.26 2,702.20	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
0,300.00	31.37	200.01	0,700.00	5.17	2,102.13	2,102.20	0.00	0.00	0.00	0.00

### Plan Report for LC Tribal #12H-28-46 - Plan A Rev 0 Proposal

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)	
8,400.00	91.97	269.81	5,766.13	-9.51	-2,802.13	2,802.14	0.00	0.00	0.00	0.00	
8,500.00	91.97	269.81	5,762.69	-9.85	-2,902.07	2,902.08	0.00	0.00	0.00	0.00	
8,600.00	91.97	269.81	5,759.25	-10.19	-3,002.01	3,002.02	0.00	0.00	0.00	0.00	
8,700.00	91.97	269.81	5,755.81	-10.53	-3,101.95	3,101.96	0.00	0.00	0.00	0.00	
8,800.00	91.97	269.81	5,752.37	-10.87	-3,201.89	3,201.91	0.00	0.00	0.00	0.00	
8,900.00	91.97	269.81	5,748.94	-11.21	-3,301.83	3,301.85	0.00	0.00	0.00	0.00	
9,000.00	91.97	269.81	5,745.50	-11.55	-3,401.77	3,401.79	0.00	0.00	0.00	0.00	
9,100.00	91.97	269.81	5,742.06	-11.89	-3,501.71	3,501.73	0.00	0.00	0.00	0.00	
9,200.00	91.97	269.81	5,738.62	-12.23	-3,601.65	3,601.67	0.00	0.00	0.00	0.00	
9,300.00	91.97	269.81	5,735.19	-12.57	-3,701.59	3,701.61	0.00	0.00	0.00	0.00	
9,400.00	91.97	269.81	5,731.75	-12.91	-3,801.53	3,801.55	0.00	0.00	0.00	0.00	
9,500.00	91.97	269.81	5,728.31	-13.25	-3,901.47	3,901.49	0.00	0.00	0.00	0.00	
9,600.00	91.97	269.81	5,724.87	-13.59	-4,001.41	4,001.43	0.00	0.00	0.00	0.00	
9,683.60	91.97	269.81	5,722.00	-13.87	-4,084.96	4,084.98	0.00	0.00	0.00	0.00	
Total Dept	Total Depth = 9683.60 ft - TD @ 9683.60ft - LC Tribal #12H-28-46 Plan A Rev 0_BHL TGT										

### **Plan Annotations**

Measured	Vertical	Local Coor	dinates	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
5,269.51	5,269.51	0.00	0.00	Kickoff at 5269.51 ft
5,500.00	5,493.83	-0.16	-45.74	Build Rate = 10.00°/100 ft
5,915.32	5,787.00	-1.11	-327.03	Penetration Point (Uteland Butte)
6,189.21	5,842.12	-2.01	-592.66	End Build at 6189.21 ft
6,500.00	5,831.44	-3.07	-903.26	Hold Angle at 91.97°
7,500.00	5,797.06	-6.46	-1,902.66	269.81° Azimuth
9,683.60	5,722.00	-13.87	-4,084.96	Total Depth = 9683.60 ft

### **Vertical Section Information**

Angle			Origin	Origin		Start	
Туре	Target	Azimuth (°)	Туре	+N/_S (ft)	+E/-W (ft)	TVD (ft)	
Target	LC Tribal #12H-28-46 Plan A Rev 0 BHL TGT	269.81	Slot	0.00	0.00	0.00	

### Survey tool program

From (ft)	To		Survey/Plan	Survey Tool
( )	(ft)			
0.00	9,683.60	Plan A Rev 0 Proposal		MWD

### **HALLIBURTON**

### Plan Report for LC Tribal #12H-28-46 - Plan A Rev 0 Proposal

### **Formation Details**

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,952.00	1,952.00	Green River		0.00	
2,527.00	2,527.00	Mahogany		0.00	
3,677.00	3,677.00	TGR3		0.00	
4,477.00	4,477.00	Douglas Creek		0.00	
5,247.00	5,247.00	Black Shale		0.00	
5,471.14	5,467.00	Castle Peak		0.00	
5,915.32	5,787.00	Uteland Butte (Penetration Point)		0.00	
6,036.09	5,827.00	CR1		0.00	
6,189.21	5,842.12	Landing Point		0.00	
9,683.60	5,722.00	TD @ 9683.60ft		0.00	

### Targets associated with this wellbore

	TVD	+N/-S	+E/-W	
Target Name	(ft)	(ft)	(ft)	Shape
LC Tribal #12H-28-46 Plan A_SHL	0.00	0.00	0.00	Point
LC Tribal #12H-28-46 Plan A Rev 0_BHL TGT	5,722.00	-13.87	-4,084.96	Point
LC Tribal #12H-28-46 SECTION LINES	0.00	0.00	0.00	Polygon

### **Bill Barrett Corp**

**HALLIBURTON** 

Duchesne County, UT (NAD 1927)

### North Reference Sheet for Sec. 28-T4S-R6W - LC Tribal #12H-28-46 - Plan A Rev 0

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to RKB 24' @ 7277.00ft (H&P 319). Northing and Easting are relative to LC Tribal #12H-28-46

Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Lambert Conformal Conic (2 parallel)
Central Meridian is -111.50°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:40° 39' 0.000 N°
False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 0.99990965

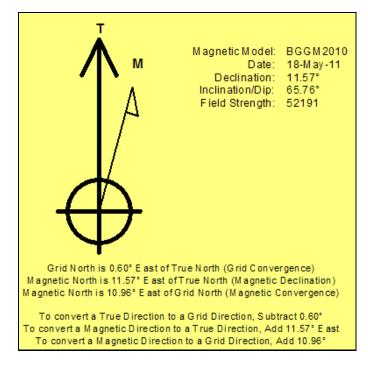
Grid Coordinates of Well: 645,570.26 ft N, 2,263,231.45 ft E

Geographical Coordinates of Well: 40° 06′ 07.07″ N, 110° 33′ 32.24″ W

Grid Convergence at Surface is: 0.60°

Based upon Minimum Curvature type calculations, at a Measured Depth of 9,683.60ft the Bottom Hole Displacement is 4,084.98ft in the Direction of 269.81 $^\circ$  (True).

Magnetic Convergence at surface is: -10.96° (18 May 2011, , BGGM2010)



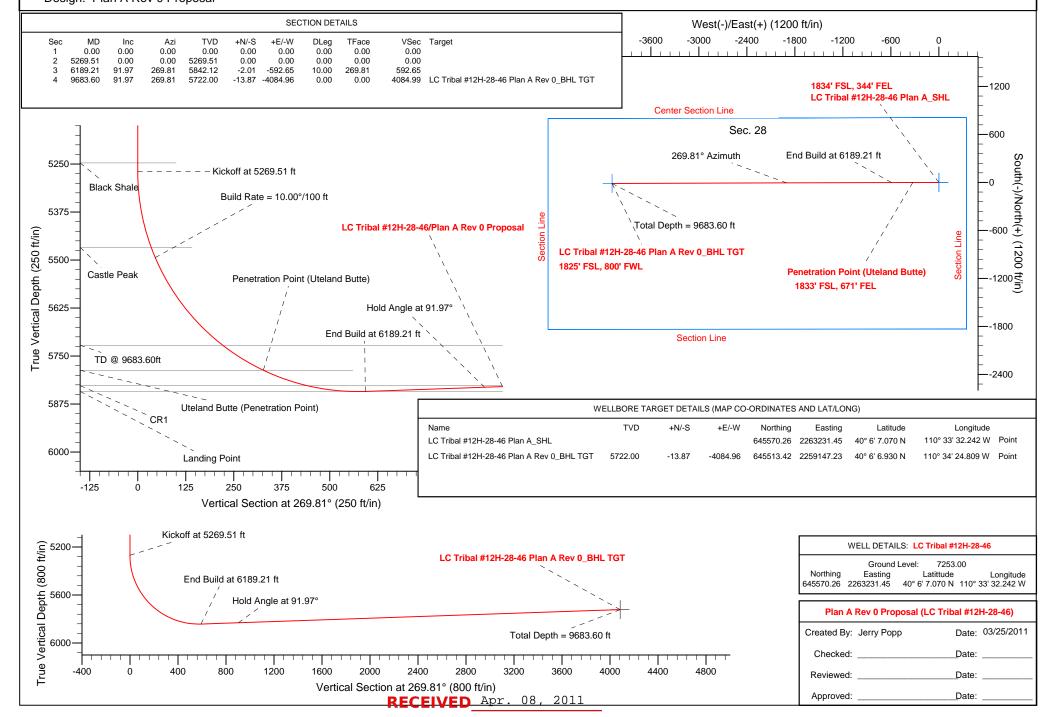
Project: Duchesne County, UT (NAD 1927)

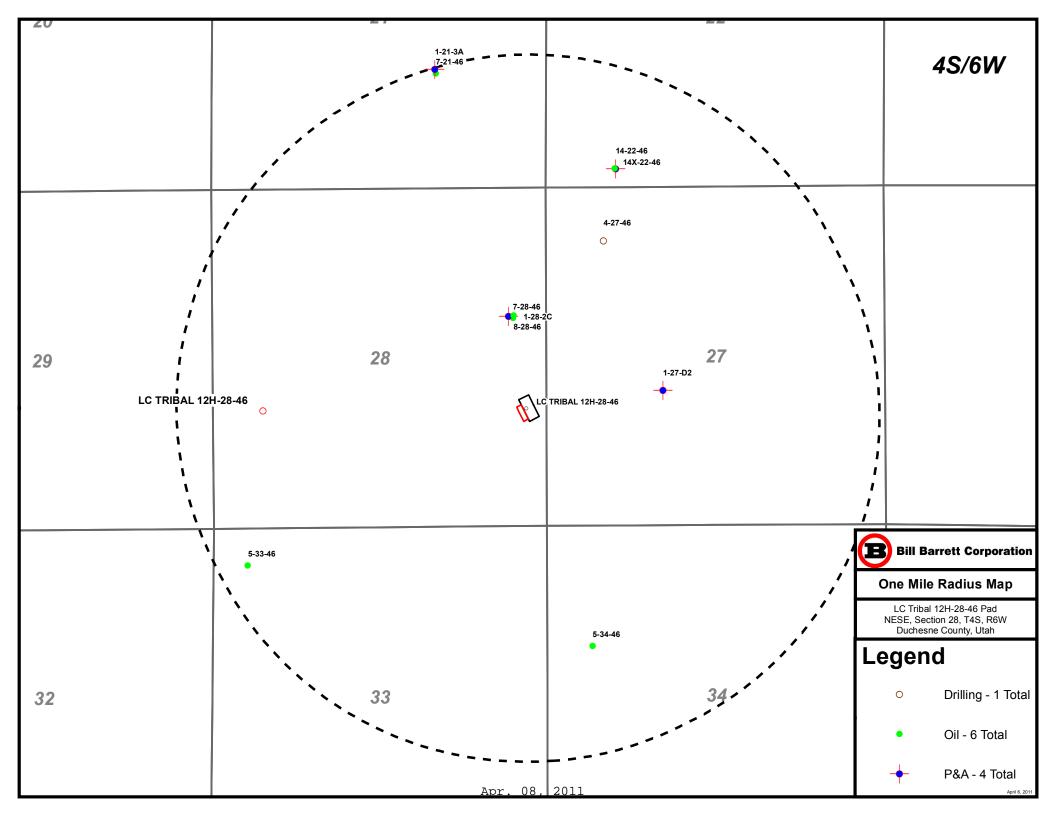
Site: Sec. 28-T4S-R6W Well: LC Tribal #12H-28-46

## Bill Barrett Corp



Wellbore: Plan A Rev 0
Design: Plan A Rev 0 Proposal







April 6th, 2011

Ms. Diana Mason, Petroleum Technician State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 P. O. Box 145801 Salt Lake City, Utah 84114-5801

RE: Horizontal Drilling

LC Tribal #12H-28-46 T4S-R6W, S.L.B.&M.

Section 28: SHL in the NESE 1,834' FSL & 344' FEL

BHL in the NWSW 1,825' FSL & 800' FWL

**Duchesne County, Utah** 

Dear Ms. Mason:

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill ("APD") regarding the above-referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-2 pertaining to a temporary 640 acre spacing unit for a horizontal well.

- Tribal Exploration and Development Agreement #14-20-H62-5500, which includes all of the subject Section 28 and other lands, allows for the drilling of the LC Tribal #12H-28-46 well. In November of 2007, BBC drilled the 7-28-46 DLB Well and earned BIA Lease #14-20-H62-6109, covering 619.35 "deep depth" acres being further described in the Exploration and Development Agreement.
- The LC Tribal #12H-28-46 will be perforated no less than 660 feet from the Section 28
   Tribal Lease boundary, in accordance with R649-3-2(3).

Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-2. If you should have any questions or need further information, please contact me at 303-312-8544.

Sincerely,

**BILL BARRETT CORPORATION** 

David Watts Landman

1099 18TH STREET

SUITE 2300

DENVER, CO 80202

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		
SUNDF	SUNDRY NOTICES AND REPORTS ON WELLS		
	sals to drill new wells, significantly deepen igged wells, or to drill horizontal laterals. l		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: LC TRIBAL 12H-28-46
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43013336310000
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , D		NE NUMBER: 12-8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSHI	IP, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian:	U	STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	□ ACIDIZE □ CHANGE TO PREVIOUS PLANS □ CHANGE WELL STATUS □ DEEPEN □ OPERATOR CHANGE □ PRODUCTION START OR RESUME □ REPERFORATE CURRENT FORMATION □ TUBING REPAIR □ WATER SHUTOFF □ WILDCAT WELL DETERMINATION  DMPLETED OPERATIONS. Clearly show all per Submitted to request confidence mentioned location.	ential status for the above ( ) ( Oi	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION OTHER: Confidential Status  volumes, etc.  ACCEPTED by the Utah Division of I, Gas and Mining R RECORD ONLY
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Venessa Langmacher	303 312-8172	Senior Permit Analyst	
SIGNATURE N/A		<b>DATE</b> 6/8/2011	

Sundry Number: 1-6276 Approval of this: 43013336310000

Action is Necessary

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-6109
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	sals to drill new wells, significantly deepen e ugged wells, or to drill horizontal laterals. Use		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: LC TRIBAL 12H-28-46
2. NAME OF OPERATOR: BILL BARRETT CORP			<b>9. API NUMBER:</b> 43013336310000
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300, [		E NUMBER: -8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 28	IP, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian: U		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
This sundry is being casing depth. Per dia and Michael Lee (BL currently permitted		e in the proposed surface by (BBC Drilling Engineer) 5/8" at 1500' (versus the tion zone at this location ease contact Brent Murphy	Accepted by the Utah Division of Oil, Gas and Mining
		Da B	y: 07/11/2011 y:
NAME (PLEASE PRINT) Tracey Fallang	<b>PHONE NUMBER</b> 303 312-8134	<b>TITLE</b> Regulatory Manager	
SIGNATURE N/A		<b>DATE</b> 6/30/2011	

BTR/LC HZ Well Well name: **BBC** Operator: Surface

Location: Utah

String type:

**Design parameters:** Minimum design factors: **Environment:** Collapse Collapse: H2S considered?

Mud weight: 8.900 ppg Design factor

Design is based on evacuated pipe.

1.125

No Surface temperature: 75 °F Bottom hole temperature: 96 °F 1.40 °F/100ft

Temperature gradient: Minimum section length: 1,000 ft

Minimum Drift: Design factor 1.00 Cement top:

1.80 (J)

8.750 in Surface

**Burst** 

Max anticipated surface

Annular backup:

pressure: 527 psi Internal gradient: 0.220 psi/ft Calculated BHP 857 psi

9.50 ppg

Tension:

**Burst:** 

8 Round STC: 8 Round LTC:

Premium:

Body yield:

1.80 (J) 1.60 (J) Buttress: 1.50 (J) 1.50 (B)

Tension is based on buoyed weight. Neutral point: 1,302 ft

Non-directional string.

Re subsequent strings: Next setting depth: 4,697 ft Next mud weight: 9.500 ppg Next setting BHP: 2,318 psi

Fracture mud wt: Fracture depth: Injection pressure 11.000 ppg 1,500 ft 857 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1500	9.625	36.00	K-55	ST&C	1500	1500	8.765	106.8
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	693	2020	2.913	527	3520	6.68	47	423	9.02 J

Bill Barrett

Date: June 23,2011 Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 1500 ft, a mud weight of 8.9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Sundry Number: 1-6329 Approval of this: 43013336310000

Action is Necessary

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	G	5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-6109
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
Do not use this form for proposition hole depth, reenter plu DRILL form for such proposals.	sals to drill new wells, significantly deepen exis ugged wells, or to drill horizontal laterals. Use A	ting wells below current APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: LC TRIBAL 12H-28-46
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43013336310000
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , D	<b>PHONE N</b> Denver, CO, 80202 303 312-81		9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSHI	IP, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian: U		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME
7/15/2011	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
SUBSEQUENT REPORT	☐ DEEPEN ☐	FRACTURE TREAT	☐ NEW CONSTRUCTION
Date of Work Completion:	☐ OPERATOR CHANGE ☐	PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME ☐	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION ☐	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR ☐	VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	☐ APD EXTENSION
Report Date:	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:
12. DESCRIBE PROPOSED OR CO	DMPLETED OPERATIONS. Clearly show all pertiner	nt details including dates, depths, v	olumes, etc.
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  On 6/30/11, BBC submitted a sundry request to change surface casing setting depth to 1500 ft. After further review, BBC is submitting another request to drill a pilot hole on this well, similar to the previous horizontal wells BBC has drilled in this area. A revised drilling plan with proposed changes (from 6/30/11) and this request is attached. Please contact Brent Murphy at 303-312-8144 for any questions regarding this proposed modification.  Date:    NAME (PLEASE PRINT)   PHONE NUMBER   TITLE			
Tracey Fallang	<b>PHONE NUMBER</b> 303 312-8134	Regulatory Manager	
SIGNATURE N/A		<b>DATE</b> 7/1/2011	

### DRILLING PLAN (Revised 7/1/11)

### BILL BARRETT CORPORATION LC Tribal 12H-28-46

SHL: NESE, 1834' FSL, 344' FEL, Section 28-T4S-R6W BHL: NWSW, 1825' FSL & 800' FWL, Section 28-T4S-R6W

Duchesne Co., UT

Bill Barrett Corporation (BBC) intends to drill a vertical "pilot hole" 200' into the Wasatch, obtaining open hole logs in the vertical portion of the wellbore. Once having successfully obtained log data for determination of lateral wellbore placement, BBC would then plug and abandon the vertical portion of the wellbore from 300' below to +/- 300' above the planned kick off point (600' cement plug). Once the cement plug has cured accordingly BBC would utilize the cement plug to side track the wellbore at kick off point. The lateral portion of the wellbore would then be drilled horizontally through the prospective zone within the Uteland Butte, as identified by open hole logs from the pilot hole.

# 1 - 3. <u>Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and</u> Gas and Other Minerals

# VERTICAL – PILOT HOLE - FORMATION TOPS Formation Depth – MD

romanon	
Surface casing	1500°
Green River	<mark>1952'</mark>
<mark>Mahogany</mark>	<mark>2527'</mark>
TGR3	<mark>3677'</mark>
Douglas Creek	<mark>4477'</mark>
Black Shale	<b>5247</b> '
Castle Peak	<mark>5467'</mark>
Uteland Butte	<mark>5787'</mark>
CR-1	<mark>5827'</mark>
Wasatch	<mark>5987'</mark>
TD	<mark>6187'</mark>

The planned cement plug would extend from +/- 5500' back to 4900'

#### HORIZONTAL FORMATION TOPS

<b>Formation</b>	Depth – MD	Depth - TVD
Surface casing	1500'	1500'
Green River	1952'	1952'
Mahogany	2527'	2527'
TGR3	3677'	3677'
Douglas Creek	4477'	4477'
Black Shale	5247'	5247'
KOP	5270'	5270'
Castle Peak	5471'	5467'
Uteland Butte	5915'	5787'
(Penetration Point)		
CR1	6036'*	5827'
Landing Point	6189'	5842'
TD (CR1)	9684'	5722'

<sup>\*</sup>PROSPECTIVE PAY

The Uteland Butte CR1 is the primary objectives for oil/gas.

Drilling Plan LC Tribal 12H-28-46 Duchesne Co., UT

### 4. <u>Casing Program</u>

<u>Hole</u>	<b>SETTIN</b>	G DEPTH	Casing	Casing	Casing		
Size	(FROM)	<u>(TO)</u>	<u>Size</u>	Weight	Grade	<b>Thread</b>	Condition
12-1/4"	surface	1500°	9 5/8"	36.0 ppf	J or K 55	ST&C	New
8 3/4"	surface	5000'	7"	23.0 ppf	P-110	LT&C	New
6 1/4"	5000'	TD'	4 1/2	11.6 ppf	P-110	LT&C	New
			Liner				

### 5. <u>Cementing Program</u>

9 5/8" Surface Casing	Cement with approximately 480 sx Premium Plus – Type III cement with additives mixed at 14.8 ppg (yield = 1.35 ft <sup>3</sup> /sx), calculated hole volume with 100% excess. <i>Top out</i>		
	* *		
	<i>cement</i> , if required: 100 sx of Premium cement with		
	additives mixed at 15.8 ppg (yield = $1.17 \text{ ft}^3/\text{sk}$ )		
7" Intermediate Casing	Lead with approximately 315 sx HOWCO Light Premium		
	cement with additives, mixed at 11.0 ppg (yield = 3.14		
	$ft^3/sx$ ).		
	Tail with approximately 280 sx Halliburton 50/50 POZ		
	Premium cement with additives mixed at 13.5 ppg (yield =		
	$1.46 \text{ ft}^3/\text{sx}$ ).		
	Planned TOC = 1000' above the KOP (tail).		
4 ½" Liner	No cement will be used in this section. Swell packers or		
	Packers Plus (or equivalent) will be run to isolate the		
	production hole from the intermediate casing section.		
Note: Top of Toil coment for the intermediate string will be calculated to 1000's shows the VOD			

Note: Top of Tail cement for the intermediate string will be calculated to 1000' above the KOP using gauge hole plus 50% excess. Lead to surface.

### 6. <u>Mud Program</u>

<u>Interva</u>	Weight	Viscosity	Fluid Loss	<u>Remarks</u>
<u>l</u>			(API filtrate)	
40' – <mark>1,500'</mark>	8.4 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid
1,000	0 0.0	20 00	110	System
<mark>1,500'</mark> – 3000'	8.9 - 9.2	26 - 36	NC	Fresh Water with sweeps
3000' - 5000'	9.2 - 9.4	42 - 55	6 – 10	Fresh Water PHPA
5000' - TD	9.0 - 9.2	45 - 58	4 – 10	Fresh Water PHPA

Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.

Drilling Plan LC Tribal 12H-28-46 Duchesne Co., UT

### 7. BOP and Pressure Containment Data

<b>Depth Intervals</b>	BOP Equipment						
0 – <mark>1,500'</mark>	No pressure control required						
1,500' – TD	11" 5000# Ram Type BOP						
	11" 5000# Annular BOP						
- Drilling spool to a	- Drilling spool to accommodate choke and kill lines;						
- Ancillary and cho	ske manifold to be rated @ 5000 psi;						
- Ancillary equipment and choke manifold rated at 5,000#. All BOP and BOPE tests will be in							
accordance with the requirements of onshore Order No. 2;							
- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in							
advance of all BO	OP pressure tests.						
- BOP hand wheels	may be underneath the sub-structure of the rig if the drilling rig used is set up						
to operate most efficiently in this manner.							

### 8. <u>Auxiliary Equipment</u>

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

### 9. Testing, Logging and Core Programs

Cores	None anticipated;				
Testing	None anticipated; drill stem tests may be run on shows of interest;				
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;				
Surveys	MWD as needed to land wellbore;				
Logging	DIL-GR-SP, FDC-CNL-GR-CALIPER-Pe-Microlog, Sonic-GR (all TD to				
surface). FMI & Sonic Scanner to be run at geologist's discretion.					
Note: All open hole logs would be run on the proposed "pilot hole" portion of the wellbore. FMI					
and CAL may	and CAL may be run on the lateral portion of the horizontal wellbore at the geologist's discretion.				

### 10. Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4633 psi\* and maximum anticipated surface pressure equals approximately 2503 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

### 11. Location and Type of Water Supply

Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W.

<sup>\*</sup>Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

<sup>\*\*</sup>Maximum surface pressure = A - (0.22 x TD)

Drilling Plan LC Tribal 12H-28-46 Duchesne Co., UT

### 12. Drilling Schedule

Location Construction: Constructed 6/23/2011

Spud: Conductor Casing Spud 7/7/2011

Surface Casing Spud Date Approx. 9/1/2011

Duration: 25 days drilling time

25 days completion time

## **BLM - Vernal Field Office - Notification Form**

Oper	rator Bill Barrett Corporation	Rig Nam	e/# <u>i ribie</u>	9 A			
Subr	nitted By <u>Venessa Langmach</u>	Phone Nur	nber 303-	312-8172			
	Name/Number LC Tribal 12						
	•		10 D	ango 6W/			
Qtr/Qtr NESE Section 28 Township 4S Range 6W							
	e Serial Number <u>1420H6261</u>	09					
API I	Number <u>43-013-33631</u>						
	d Notice – Spud is the initia below a casing string.	l spudding o	of the we	ll, not drilling			
	Date/Time <u>07/07/2011</u>	08:00	AM 🗸	РМ			
<u>Casi</u> time	<u>ng</u> – Please report time cas	ing run star	ts, not ce	ementing			
	Surface Casing		RF	CEIVED			
	Intermediate Casing		JU	IL 0 6 2011			
	Production Casing		DIV. OF (	OIL, GAS & MINING			
	Liner			- · · · · · · · · · · · · · · · · · · ·			
	Other						
	Date/Time		AM 🔛	PM 🔛			
BOP	E Initial BOPE test at surface BOPE test at intermediate 30 day BOPE test Other	<b>.</b>					
	Date/Time		AM 🗌	PM			
Rem	narks						

	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOUR		5.LEASE DESIGNATION AND SERIAL NUMBER:		
	DIVISION OF OIL, GAS, AND M	INING	14-20-H62-6109		
SUNDF	RY NOTICES AND REPORTS	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
Do not use this form for proposition-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME:				
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: LC TRIBAL 12H-28-46				
2. NAME OF OPERATOR: BILL BARRETT CORP			<b>9. API NUMBER:</b> 43013336310000		
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300, D		IONE NUMBER: 312-8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 28	P, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian	n: U	STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT	, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	☐ ALTER CASING	CASING REPAIR		
☐ NOTICE OF INTENT	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	CHANGE WELL NAME		
Approximate date work will start:	CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION		
Dute of Work completion.	OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK		
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON		
7/7/2011	TUBING REPAIR	□ VENT OR FLARE	WATER DISPOSAL		
☐ DRILLING REPORT	□ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION		
Report Date:					
		☐ OTHER	OTHER:		
	MPLETED OPERATIONS. Clearly show all potential submitted to notify that		volumes, etc.		
	07/2011 at 8:00 am by Tripl				
077	07/2011 at 0.00 am by mpi	CADIMING.	Accepted by the		
			Utah Division of		
		Oi	il, Gas and Mining		
		FOR	R RECORD ONLY		
NAME (PLEASE PRINT)	PHONE NUMBE	R TITLE			
Venessa Langmacher	303 312-8172	Senior Permit Analyst			
SIGNATURE N/A		<b>DATE</b> 7/20/2011			

### STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

### FORM 6

### **ENTITY ACTION FORM**

Operator:

**Bill Barrett Corporation** 

Operator Account Number: N 2165

Address:

1099 18th Street, Suite 2300

city Denver

zip 80202 state CO

Phone Number: (303) 312-8172

Well 1

WNE	17	48	E\A/	
		70	5W Duchesne	
Spud Date		Entity Assignment Effective Date		
2/8/2011		5/4/11		

Well 2

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4301350641	7-26-37 BTR		SWHE	26	3S	7W	Duchesne
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		tity Assignment Effective Date
Α	99999	18131	6	/30/201	1	7	1/26/11

Well 3

API Number	Well I	Name	QQ	Sec	Twp	Rng	County	
4301333631	LC Tribal 12H-28-46		NESE	28	48	6W	Duchesne	
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date			
A	99999	18132	7/7/2011		7	7/26/11		
Comments: Spud	ding operations were co	nducted by Triple A D  BHL= SE	rilling at 8	am.	0	ONFI	DENTIAL	

**ACTION CODES:** 

A - Establish new entity for new well (single well only)

B - Add new well to existing entity (group or unit well)

C - Re-assign well from one existing entity to another existing entity

D - Re-assign well from one existing entity to a new entity

- Other (Explain in 'comments' section)

RECEIVED

JUL 2 0 2011

Venessa Langmacher	
Name (Please Print)	
Venessa Langmacher	
Signature	
Sr Permit Analyst	7/20/2011
Title	Date

# CONFIDENTIAL

# BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corporation Rig Name/# HP 319
Submitted By JET LORENZEN Phone Number 970-623-7078
Well Name/Number LC TRIBAL 12H-28-46
Qtr/Qtr NE/SE Section 28 Township 4S Range 6W
Lease Serial Number 420H626109
API Number 43-13-33631-00-X1
<u>Spud Notice</u> – Spud is the initial spudding of the well, not drilling out below a casing string.
Date/Time AM PM
Casing — Please report time casing run starts, not cementing times.  ✓ Surface Casing  Intermediate Casing  Production Casing  Liner  Other
Date/Time <u>07/23/2011</u>
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point JUL 2 6 2011 Other  DIV. OF OIL, GAS & MINING
Date/Time 07/23/2011 18:00 AM PM
Remarks

Print Form

# CONFIDENTIAL

### BLM - Vernal Field Office - Notification Form

Oper	ator Bill Barrett Corporation Rig Name/# H&P	319			
-	nitted By Glenn Randel Phone Number 970				
	Name/Number LC Tribal 12H-28-46				
Qtr/C	tr <u>NE/SE</u> Section 28 Township 48 F	Range 6W			
	Serial Number 1420H626109				
API 1	Number <u>43-013-33631-00-X1</u>				
	Notice – Spud is the initial spudding of the we	ell, not drilling			
out c	elow a casing string.				
	Date/Time AM	РМ			
times	ng – Please report time casing run starts, not cos. Surface Casing Intermediate Casing Production Casing Liner Other	ementing			
	Date/Time <u>07/31/2011</u>	PM 🗸			
BOPE Z	Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other	RECEIVED AUG 0 1 2011 DIV. OF OIL, GAS & MINING			
	Date/Time <u>08/01/2011</u> <u>02:30</u> AM ✓	РМ			
Remarks 3 1/2" ram & door test only after changing ram size.					

			Tanu a		
	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER:		
	NING	14-20-H62-6109			
SUNDF	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE				
	sals to drill new wells, significantly deeper igged wells, or to drill horizontal laterals.		7.UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL			8. WELL NAME and NUMBER:		
Gas Well			LC TRIBAL 12H-28-46		
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43013336310000		
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300, D		DNE NUMBER: 12-8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNSHI	P, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian:	U	STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPORT,	, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR		
☐ NOTICE OF INTENT	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	CHANGE WELL NAME		
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE		
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	□ NEW CONSTRUCTION		
Date of Work Completion:					
		☐ PLUG AND ABANDON	☐ PLUG BACK		
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION		
Dute of Spaa.	☐ REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON		
,	UBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
✓ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	APD EXTENSION		
7/1/2011	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR CO	MPLETED OPERATIONS. Clearly show all pe	rtinent details including dates, depths.	volumes, etc.		
	to report: well spud. No other		•		
, , ,	·	, , ,			
			Accepted by the		
			Utah Division of		
			I, Gas and Mining		
		FOF	R RECORD ONLY		
NAME (PLEASE PRINT) Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	TITLE Permit Analyst			
SIGNATURE		DATE			
N/A		8/4/2011			

# CONFIDENTIAL

Print Form

### BLM - Vernal Field Office - Notification Form

	ator Bill Barrett Corporation			
	nitted By <u>JET LORENZEN</u>			623-7078
	Name/Number #LC TRIBAL  Otr NE/SE Section 28			ange 6W
	e Serial Number <u>1420H6261</u>			ange <u>ow</u>
	Number <u>43-013-33631-00-X1</u>	V		
Spuc	I Notice – Spud is the initia below a casing string.	l spudding o	f the we	ll, not drilling
	Date/Time <u>08/09/2011</u>	10:00	АМ 🗌	PM 🗸
<u>Casii</u>	<u>ng</u> – Please report time cas	ing run star	ts, not ce	ementing
	Surface Casing			RECEIVED
	Intermediate Casing			AUG 0 9 2011
	Production Casing			DIV. OF OIL, GAS & MINING
	Liner Other			DIV. Of OIL, GAO & III.
	Date/Time		АМ 🗌	РМ
BOP	<u>E</u>			
	Initial BOPE test at surface			
	BOPE test at intermediate	casing poin	t	
	30 day BOPE test Other			
	Date/Time		AM 🗔	РМ
	Date/Time		Al-1	
Rem	narks			

# CONFIDENTIAL

### **Carol Daniels**

From:

JET

To:

, "Dennis Ingram", "BRENTMURPHY", "Dan Jarvis", "Carol Daniels", "E Winick",

, "VenessaLangmacher", "T Falling"

Date:

8/9/2011 2:27 PM

**Attachments:** 

will be running prod liner. open hole production w/ no cement. thanks jet

RECEIVED
AUG 0 9 2011

DIV. OF OIL, GAS & MINING

STATE OF UTAH  DEPARTMENT OF NOTICES AND MINING  SILESE DESCRIPTION AND SERTAL NUMBER: 14-20-10/2-0-				
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current. DRILL form for such proposals.  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current. DRILL form for such proposals.  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current. DRILL form for such proposals.  Let YiPE OF WELL ANAME and NUMBER: CONTROL TO FRENCH TO THE PRINT TO THE P		STATE OF UTAH		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill now wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMITTO  Do not use this form for proposals to drill now wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMITTO  DO NOTICES WELL  LITYPE OF WELL  SAME LARREST CORP  1. APPLICATION FOR PERMITTO  POPULATION OF WELL  1. APPLICATION FOR PERMITTO  POPULATION OF WELL  1. LOCATION OF WELL  1. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF ACTION  TY		5 I FASE DESIGNATION AND SEDIAL NUMBER		
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hold depth; reenter plugged wells, or to drill hortzontal laterals. Use APPLICATION FOR PERMIT TO PUBLICATION FOR PUBLICATION FOR PERMIT TO PUBLICATION FOR PERMIT FOR PERMIT FOR PUBLICATION FOR PUBLICATION FOR PERMIT FOR PUBLICATION FOR PU				
DECIDITION OF WELL  TYPE OF WELL  GAS Well  L TYPE OF WELL  CASE Well  L TORRES OF CORRECTOR:  SADDIES OF CORRECTOR:  PHONE NUMBER:  (A) 303 312-8164 Est  COUNTY:  OLOCHESINE  STATE:  UTAH  COUNTY:  OLOCHESINE  STATE:  UTAH  COUNTY:  OLOCHESINE  STATE:  UTAH  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF ACTION  OF SUBMISSION  TYPE OF SUBMISSION  CARGINET COMPTIBIL  AGRICULTE CHANGE WELL STATUS  CHANGE TO PREVIOUS PLANS  CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  CHANGE WELL	SUNDF	RY NOTICES AND REPORTS O	N WELLS	
Sas Well  San NAME OF OPERATOR: BILL BARRETT CORP  SAND OF OPERATOR: BILL BARRETT CORP  3. ADDRESS OF OPERATOR: BILL BARRETT CORP  4. DOATION OF WELL FOOTINGE AT SWAPCE: GUINTY, SECTION, TOWNSHIP, RANGE, MERIDIAN: GUINTY, SECTION, TOWNSHIP, CHAOS Range: 06.0W Mendian: U  11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION  ACIDIZE ALTERACIANO CHAMBER TOWNSHIP, CHAOS RANGE: CHAMBER SWAPCE: CHAMBER SWAPCE: CHAOS WELL CHARBER SWAPCE: CHAOS WELL CHAOS WELL CHARBER SWAPCE: CHAOS WELL	bottom-hole depth, reenter plu	igged wells, or to drill horizontal laterals. Use		7.UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: BILL BARRETT CORP  1.099 18th Street Size 2300 , Deriver, CO, 90202 303 312-8164 Ext AITAONIT  1.094 18th Street Size 2300 , Deriver, CO, 90202 303 312-8164 Ext AITAONIT  1.004 1007 WELL POOTAGES AT SURFACE: 1034 FELD 304 FELD 304 FEDWARDHIP, BANGE, MERIDIAN. QTAYLOR, SECTED A, TOWNShip; 04.05 Range; 06.0W Meridian: U  1.1. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  1.1. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  1.2. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  1.3. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  1.4. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  1.4. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  1.5. CHECK APPROPRIATE SOME SUBMISSION  1.5. CHECK APPROPRIATE SOME WELL STATUS  1.5. CHECK APPROPRIATE CONTRIBUTION  1.5. CHECK APP	1. TYPE OF WELL			8. WELL NAME and NUMBER:
3. ADDRESS OF OPERATOR: PHONE NUMBER: S. ADDRESS OF OPERATOR CO. 80202	Gas Well			LC TRIBAL 12H-28-46
1.093 IBM Street Stee 2300 , Derver, CO, 80202 303 312-8164 Ext ALTAMONT  **POOTAGES AT SUBFRACE: 1.064 TOUR WELL 1.1 CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  **TYPE OF SUBMISSION**  TYPE OF SUBMISSION**    ORACIDIZE				
** LOCATION OF WELL  1834 PSI, 0344 FEL  1834 PSI, 0344 PSI, 0344 PSI  1834 PSI, 0344 PSI  1834 PSI, 0344 PSI, 0344				
TOPICAGES AT SUBFRACE:    GTAY GTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:   GTR/GTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:   TYPE OF ACTION    TYPE OF ACTION    GTR/GTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:   TYPE OF SUBMISSION    GTR/GTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:   GTR/GTR, GTR/GTR/GTR, GTR/GTR/GTR, GTR/GTR, GTR/GTR, GTR/GTR, GTR/GTR, GTR/GTR		Denver, CO, 80202 303 312-8	3164 EXT	
11.  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION    ACIDIZE	FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			
TYPE OF SUBMISSION    ACIDIZE   ALTER CASING   CASING REPAIR				
ACCEPTED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  AUGUST A	11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
NOTICE OF INTENT	TYPE OF SUBMISSION		TYPE OF ACTION	
Approximate date work will start:    GHANGE WELL STATUS   COMMINGLE PRODUCING FORMATIONS   CONVERT WELL TYPE		ACIDIZE	ALTER CASING	CASING REPAIR
Approximate date work will start:    GHANGE WELL STATUS   COMMINGLE PRODUCING FORMATIONS   CONVERT WELL TYPE	NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TURING	CHANGE WELL NAME
SUBSEQUENT REPORT Date of Work Completion:  □ DEEPEN □ FRACTURE TREAT □ NEW CONSTRUCTION □ OPERATOR CHANGE □ PLUG AND ABANDON □ PLUG BACK □ SPUD REPORT Date of Spud: □ PRODUCTION START OR RESUME □ RECLAMATION OF WELL SITE □ RECOMPLETE DIFFERENT FORMATION □ TUBING REPAIR □ VENT OR FLARE □ WATER DISPOSAL □ WATER SHUTOFF □ SI TA STATUS EXTENSION □ APD EXTENSION □ OTHER: □				
Date of Work Completion:    OPERATOR CHANGE   PLUG AND ABANDON   PLUG ABANDON	SUBSPOUENT DEPORT			
SPUD REPORT Date of Spud:    PRODUCTION START OR RESUME   RECLAMATION OF WELL SITE   RECOMPLETE DIFFERENT FORMATION     REPERPORATE CURRENT FORMATION   SIDETRACK TO REPAIR WELL   TEMPORARY ABANDON     TUBING REPORT   WATER SHUTOFF   SI TA STATUS EXTENSION   APD EXTENSION     WILDCAT WELL DETERMINATION   OTHER   OTHER:     12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  August 2011 Monthly Drilling Activity Report attached.    Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY     FOR RECORD ONLY     DATE   PROPOSED OR COMPLETED OPERATIONS. TITLE     Permit Analyst   Permit Analyst     SIGNATURE   DATE     PRODUCTION START OR RESUME   RECLAMATION OF WELL SITE   RECOMPLETE DIFFERENT FORMATION     TUBING REPAIR   WATER DISPOSAL   WATER DISPOSAL     OTHER   WATER DISPOSAL   WATER DISPOSAL     OTHER   WATER DISPOS	Date of Work Completion:			
Date of Spud: D		☐ OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK
Detiling Report Report Proposed Or Completed Operations. Clearly show all pertinent details including dates, depths, volumes, etc.  August 2011 Monthly Drilling Activity Report attached.  Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY  NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER  TITLE Permit Analyst  SIGNATURE  TEMPORATY ABANDON  VENT OR FLARE  WATER DISPOSAL  WATER DISPOSAL  APPLEXENSION  OTHER:  WATER DISPOSAL  APPLEXENSION  APPLEXENSION  ACCEPTED WATER STATUS EXTENSION  OTHER:  WATER DISPOSAL  APPLEXENSION  OTHER:  DATE  TITLE  Permit Analyst  SIGNATURE  DATE		PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
DRILLING REPORT Report Date: 8/31/2011    WATER SHUTOFF	Date of Spud:	☐ REPERFORATE CURRENT FORMATION ☐	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
Report Date: 8/31/2011		☐ TUBING REPAIR ☐	VENT OR FLARE	WATER DISPOSAL
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. August 2011 Monthly Drilling Activity Report attached.  Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY  NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER Permit Analyst  SIGNATURE  DATE		□ WATER SHUTOFF □	SI TA STATUS EXTENSION	APD EXTENSION
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  August 2011 Monthly Drilling Activity Report attached.  Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY  NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER TITLE Permit Analyst  SIGNATURE  DATE	8/31/2011	WILDCAT WELL DETERMINATION	OTHER	OTHER:
August 2011 Monthly Drilling Activity Report attached.  Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY  NAME (PLEASE PRINT) Brady Riley  303 312-8115  PHONE NUMBER Permit Analyst  SIGNATURE  DATE	42 DECORPT PROPOSED OF CO			
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY  NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER Permit Analyst  SIGNATURE  Date	l .			olumes, etc.
NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER Permit Analyst  SIGNATURE  Utah Division of Oil, Gas and Mining FOR RECORD ONLY  TITLE Permit Analyst  DATE	August 2	off Monthly Drilling Activity Kep	ort attached.	
NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER Permit Analyst  SIGNATURE  Utah Division of Oil, Gas and Mining FOR RECORD ONLY  TITLE Permit Analyst  DATE			A	accepted by the
NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER Permit Analyst  SIGNATURE  DATE			Į	Jtah Division of
NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER Permit Analyst  SIGNATURE  DATE			Oil	, Gas and Mining
NAME (PLEASE PRINT) Brady Riley 303 312-8115  PHONE NUMBER Permit Analyst  SIGNATURE  DATE			FOR	RECORD ONLY
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_	Tribal 12	_						8/2/2011 06:00				
API/UWI 43-013-33631			State/Province UT	ce	County Duchesne	Field Name Brundag Canyon Canyon	ge /Lake	Well Status Released for Work	Total Depth (ftKB) 9,574.0	Primary Job Type I.0 Drilling & Completion		
Time Lo			_					<b>'</b>	<b>'</b>			
Start Time 06:00	Dur (hr)	07:00	Code 12	RUN C	Category ASING & CEMEN	JT	CIRCUL A	ATE CASING W/~95% RET	Com URNS HELD PJSM W/H	OWCO & RIG CREW.		
07:00		07:30	12		ASING & CEMEN		WHEN B	REAKING OUT TOP DRIVI G UP TONGS TO BACK UP	FROM CASING, COUP	ING TRIED TO BACK		
07:30	2.50	10:00	12	RUN C	ASING & CEMEN	ĬΤ	INSTALL CEMENT HEAD, MANIFOLD & LINE. TEST LINE TO 5000 PSI. CEMENT CASING W/10 BBL WATER SPACER, 40 BBL SUPERFLUSH 101 @10 PPG, 10 BBL WATER SPACER, 360 SX (149 BBL) TUNED LIGHT + 0.125 PPS POLY-E-FLAKE + 1.0 PPS GRANULITE TR @ 11 PPG & 310 SX (81 BBL) 50/50 POZ + 0.3% BWOC HALAD-344 + 5% BWOC MICROBOND + 0.125 PPS POLY-E-FLAKE + 1.0 PPS GRANULITE TR + 0.1% BWOC HR-5 @ 13.5 PPG. DISPLACED W/240.5 BBL 8.7 PPG MUD. OVERDISPLACED 1/2 BBL, BUT PLUG DID NOT BUMP. BLED OFF 1 1/4 BBL & FLOATS HELD. CIP @ 10:02 HRS. FULL RETURNS THROUGHOUT JOB, BUT NO CEMENT RETURNS. OBSERVED ~10 BBL WATERY MUD AT END OF DISPLACEMENT.					
10:00	1.00	11:00	12	RUN C	ASING & CEMEN	IT	_	CEMENT HEAD & LAND IANGER RUNNING TOOL.	HANGER IN WELLHEAD.	BACK OUT & LAY		
11:00		11:30	7		CATE RIG			E RIG SERVICE.				
11:30		12:30	14	1 ==	UP B.O.P			PIPE RAMS TO 3 1/2". R				
12:30		14:30	15	TEST B			SUCCES	ST PLUG & ATTEMPT TO S. PROBLEM APPEARS 1	O BE THE HANGER IS ~	2" HIGH.		
14:30	3.50	18:00	12	RUN CASING & CEMENT			PICK UP CASING LANDING JT/RUNNING TOOL & ATTEMPT TO MAKE UP ONTO CASING HANGER W/O SUCCESS. PULL RT & WASH OUT THREADS & REMOVE O -RING SEAL FROM NOSE & MAKE UP RT ONTO HANGER. LIFT HANGER ~6" OUT OF WELLHEAD & WASH THRU ACCESS VALVES W/WATER. ATTEMPT TO RELAND, BUT HANGER STILL 2" HIGH. CASING WEIGHT STACKED OUT ON BOTTOM OF HOLE. TEST PULL ON HANGER/CASING TO ASCERTAIN IF ENOUGH STRETCH TO INSTALL EMERGENCY SLIPS. LIFTED HANGER ~2 1/2' W/200K PULL.					
18:00	3.50	21:30	14	NIPPLE	UP B.O.P		WELLHE EMERGE CUT CAS	DOWN & CHAIN OFF ORB AD & LIFT BOP. PULL HA ENCY CASING SLIPS & HA SING & LAY DOWN LANDII & INSTALL PACKOFF BUS	NGER/CASING UP XX' W NG OFF CASING W/212I NG JT/RT/HANGER. FIN	I/212K PULL. INSTALI K ON SLIPS. ROUGH		
21:30		00:00	15	TEST B	3.O.P		LAND TEST PLUG & TEST BOP. PIPE RAMS, DOOR SEALS, SAFETY VALVE, LOWER KELLY VALVE, GRAY VALVE TO 250/5000 PSI FOR 3/3 MIN EACH TEST. PULL TEST PLUG & INSTALL WEAR BUSHING.					
00:00		01:30	6	TRIPS				P NEW BIT #4 & RIH PICKI				
01:30	4.50	06:00	6	TRIPS			RIH PICK	(ING UP 138 JTS 3 1/2 DP.	PICK UP 33 X 4 3/4 DC	TO 5500'.		
	Γribal 12				28-46 8/2 <i>i</i>			8/3/2011 06:00				
API/UWI 43-013-3			State/Province UT	ce	County Duchesne	Field Name Brundaç Canyon Canyon	ge /Lake	Well Status Released for Work	Total Depth (ftKB) 9,574.0	Primary Job Type Drilling & Completion		
Time Lo Start Time	<b>g</b> Dur (hr)	End Time	e Code		Category				Com			
06:00	. ,	06:30	6	TRIPS	Calogory		FINISH P	PICKING UP 6 1/8 DRILLST				
06:30	1.25	07:45	3	REAMII	NG		RIG DOWN LAY DOWN TRUCK. INSTALL ROTATING RUBBER & WASH 6005' TO FLOAT COLLAR @ 6100'.					
07:45		08:00	15	TEST B			CLOSE A	NNULAR PREVENTER &	TEST CASING TO 1500 F	SI FOR 15 MIN.		
08:00	1.25	09:15	3	REAMII	REAMING			DRILL SHOE TRACK. REAM THRU FLOAT COLLAR & FLOAT SHOE TWICE.  NOTE: CASING WAS ON BOTTOM, NO RATHOLE. DRILLED FROM SHOE STRAIGHT INTO FORMATION. CASING TALLY WAS ~7' SHORTER THAN THE CASING.				
09:15	1.00	10:15	2	DRILL /	ACTUAL		ROTATE	DRILL 6 1/8 HORIZONTAL	. HOLE 6190-6272'.			
10:15	0.50	10:45	10	DEVIAT	TION SURVEY		SURVEY CASING.	@ 6235', 92.63 DEG, 274.	49 AZ. EXTRA TIME DUI	TO PROXIMITY OF 7		
		12.00	2	DDILL A	ACTUAL		SLIDE DI	RILL 6 1/8 HOLE 6272-6302	2'.			
10:45	2.25	13:00	-	1			ROTATE DRILL 6 1/8 HOLE 6302-6330'.					
10:45 13:00	0.75	13:45 15:00	2	DRILL /	ACTUAL ACTUAL		ROTATE		330'.			



Time Log	g				
Start Time	Dur (hr)	End Time	Code	Category	Com
15:00			2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6342-6378'.
15:45			2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6378-6387'.
16:45	1.00	17:45	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6387-6424'.
17:45	0.75	18:30	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6424-6434'.
18:30	0.75	19:15	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6434-6471'.
19:15	0.50	19:45	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6471-6480'.
19:45	0.75	20:30	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6480-6569'.
20:30	0.50	21:00			SLIDE DRILL 6 1/8 HOLE 6569-6576'.
21:00	1.00	22:00	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6576-6710'.
22:00	0.50	22:30	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6710-6724'.
22:30	0.50	23:00	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6724-6758'.
23:00	0.50	23:30	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6758-6770'.
23:30	0.25	23:45	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6770-6805'.
23:45	0.25	00:00	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6805-6811'.
00:00	0.75	00:45	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6811-6900'.
00:45	0.50	01:15	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6900-6905'.
01:15	0.25	01:30	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6905-6948'.
01:30	0.50	02:00	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6948-6956'.
02:00	0.25	02:15	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 6956-6995'.
02:15	0.50	02:45	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 6995-7001'.
02:45	0.25	03:00	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7001-7044'.
03:00	0.50	03:30	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7044-7050'.
03:30	0.25	03:45	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7050-7091'.
03:45	0.25	04:00	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7091-7095'.
04:00	0.50	04:30	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7095-7139'.
04:30	0.75	05:15	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7139-7148'.
05:15	0.25	05:30	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7148-7186'.
05:30	0.50	06:00	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7186-7192'.
#LC T	ribal 12	H-28-	46 fka	#16-28-46 8/3/2011 0	6:00 - 8/4/2011 06:00

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43-013-33631	UT	Duchesne	Brundage	Released for Work	9,574.0	Drilling & Completion
			Canyon/Lake			
			Canyon			

Time Lo	Dur (hr)	End Time	Code	Category	Com
06:00	. ,	07:00	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7192-7235'.
07:00	0.75	07:45	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7235-7245'.
07:45	1.00	08:45	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7245-7330'.
08:45	0.50	09:15	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7330-7345'.
09:15	0.75	10:00	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7345-7425'.
10:00	0.50	10:30	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7425-7433'.
10:30	0.25	10:45	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7433-7472'.
10:45	0.75	11:30	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7472-7480'.
11:30	0.50	12:00	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7480-7520'.
12:00	0.50	12:30	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7520-7528'.
12:30	0.50	13:00	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7528-7567'.
13:00	1.00	14:00	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7567-7582'.
14:00	0.50	14:30	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7582-7616'.
14:30	0.75	15:15	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7616-7631'.
15:15	0.50	15:45	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7631-7663'.
15:45	1.50	17:15	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7663-7685'.
17:15	0.25	17:30	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7685-7711'.
17:30	0.50	18:00	7	LUBRICATE RIG	ROUTINE RIG SERVICE.
18:00	2.25	20:15	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7711-7733'.
20:15	1.75	22:00	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7733-7806'.
22:00	1.00	23:00	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7806-7818'.
23:00	0.50	23:30	2	DRILL ACTUAL	ROTATE DRILL 6 1/8 HOLE 7818-7854'.
23:30	1.00	00:30	2	DRILL ACTUAL	SLIDE DRILL 6 1/8 HOLE 7854-7863'.

Page 2/8
RECEIVED Sep. 06, 2011 www.peloton.com Report Printed: 9/1/2011



				-								
Time Lo	og .											
Start Time	Dur (hr)	End Time	_		Category				Com			
00:30		01:15	2	DRILL ACTUAL				DRILL 6 1/8 HOLE 7863-791				
01:15	0.75	02:00	20	DIRECT	TONAL WORK		GR STOPPED READING. REBOOT COMPUTER & ADJUST SURFACE EQUIPMENT.					
02:00	0.50	02:30	2	DRILL A	ACTUAL		ROTATE	DRILL 6 1/8 HOLE 7915-795	50'.			
02:30	0.50	03:00	2	DRILL A	DRILL ACTUAL			RILL 6 1/8 HOLE 7950-7955'.				
03:00	1.00	04:00	2	DRILL A	ACTUAL		ROTATE	DRILL 6 1/8 HOLE 7955-804	14'.			
04:00	1.00	05:00	2	DRILL A	ACTUAL		SLIDE DR	RILL 6 1/8 HOLE 8044-8054'.				
05:00	0.50	05:30	2	DRILL A	ACTUAL		ROTATE	DRILL 6 1/8 HOLE 8054-809	92'.			
05:30	0.50	06:00	2	DRILL A	ACTUAL		SLIDE DR	RILL 6 1/8 HOLE 8092-8097'.				
#I C 7	Tribal 12	H-28-	-46 fka	#16-2	28-46 8/4/	2011 0	6:00 -	8/5/2011 06:00				
API/UWI	bu: 12		State/Province		County	Field Name		Well Status	Total Depth (ftKB)	Primary Job Type		
43-013-3	33631		UT		Duchesne	Brundag Canyon Canyon	ge	Released for Work		Drilling & Completion		
Time Lo	oa					Carryon						
Start Time	Dur (hr)	End Time	Code		Category				Com			
06:00	1.50	07:30	2	DRILL A	ACTUAL		SLIDE DR	RILL 6 1/8 HOLE 8097-8113'.				
07:30	0.50	08:00	2	DRILL A	ACTUAL		ROTATE	DRILL 6 1/8 HOLE 8113-814	10'.			
08:00	0.50	08:30	20	DIRECT	TONAL WORK		RE-LOG 8	3112-8140'. SURFACE EQL	JIPMENT DID NOT REC	ORD ON FIRST PASS.		
08:30	1.50	10:00	2	DRILL A	ACTUAL			RILL 6 1/8 HOLE 8140-8150'. DRIVESHAFT TWISTED OF SSURE.				
10:00	1.75	11:45	5	COND	MUD & CIRC		PUMP HIV	VIS SWEEP & 2X BOTTOMS	S UP.			
11:45	4.00	15:45	6	TRIPS			POH WET	TTO ~6000'. PUMP SLUG 8	& POH.			
15:45	2.25	18:00	6	TRIPS			CHANGE MWD PROBE, BREAK OFF BIT #4 (COND: 0-2-BT-G-X-I-NO-DTF). LAY DOWN MOTOR & PICK UP NEW MOTOR. MAKE UP NEW BIT #5 (STC, Mi613, SN JE0003). SCRIBE MOTOR BEND TO MWD.					
18:00	4.25	22:15	6	TRIPS			RIH. INSTALL ROTATING RUBBER, FILL STRING @ 4500'. PRECAUTIONARY WASH/REAM LAST 90'.					
22:15	0.50	22:45	20	DIRECT	TONAL WORK		CIRCULATE, ORIENT & STE UP SPERRY TOOLS.					
22:45	2.00	00:45	2	DRILL A	ACTUAL		SLIDE DRILL 6 1/8 HOLE 8150-8165'.					
00:45	1.75	02:30	2	DRILL A	ACTUAL		ROTATE DRILL 6 1/8 HOLE 8165-8188'.					
02:30	0.75	03:15	2	DRILL A	ACTUAL		SLIDE DRILL 6 1/8 HOLE 8188-8193'.					
03:15	0.75	04:00	2	DRILL A	ACTUAL		ROTATE DRILL 6 1/8 HOLE 8193-8235'.					
04:00	0.50	04:30	2	DRILL A	ACTUAL		SLIDE DRILL 6 1/8 HOLE 8235-8240'.					
04:30	0.75	05:15	2	DRILL A	ACTUAL		ROTATE	DRILL 6 1/8 HOLE 8240-828	33'.			
05:15	0.75	06:00	2	DRILL A	ACTUAL		SLIDE DR	RILL 6 1/8 HOLE 8283-8289'.				
					20.40.0/5/							
#LC 1	Tribal 12	H-28-	-46 fka	ı #16-2	28-46 8/5/ <i>i</i>	2011 0	6:00 -	8/6/2011 06:00				
API/UWI 43-013-3	Tribal 12 33631	1	-46 fka State/Provinc UT		28-46 8/5/2 County Duchesne	Field Name Brundag Canyon, Canyon	e je	Well Status Released for Work	Total Depth (ftKB) 9,574.0	Primary Job Type Drilling & Completion		
API/UWI 43-013-3	Tribal 12		State/Province		County Duchesne	Field Name Brundag Canyon	e je	Well Status	9,574.0			
API/UWI 43-013-3 Time Lo Start Time	Tribal 12 33631  Pg  Dur (hr)	End Time	State/Province UT	ce	County Duchesne Category	Field Name Brundag Canyon	e ge /Lake	Well Status Released for Work				
API/UWI 43-013-3 Time Lo Start Time 06:00	7ribal 12 33631  Pg Dur (hr) 0.50	End Time	State/Province UT  Code 2	DRILL A	County Duchesne  Category  ACTUAL	Field Name Brundag Canyon	e ge /Lake /SLIDE DR	Well Status Released for Work RILL 6 1/8 HOLE 8289-8295'.	9,574.0 Com			
API/UWI 43-013-3  Time Lo Start Time 06:00 06:30	Tribal 12 33631  Pg Dur (hr) 0.50 1.50	End Time 06:30 08:00	State/Province UT  Code 2 2	DRILL A	County Duchesne  Category ACTUAL ACTUAL	Field Name Brundag Canyon	ge /Lake /SLIDE DR	Well Status Released for Work RILL 6 1/8 HOLE 8289-8295'. DRILL 6 1/8 HOLE 8295-837	9,574.0 Com			
API/UWI 43-013-3  Time Lo Start Time 06:00 06:30 08:00	Tribal 12 33631  Dur (hr) 0.50 1.50 1.75	End Time 06:30 08:00 09:45	State/Province UT  Code 2 2 2	DRILL A	County Duchesne  Category ACTUAL ACTUAL ACTUAL	Field Name Brundag Canyon	SLIDE DR	Well Status Released for Work RILL 6 1/8 HOLE 8289-8295'. DRILL 6 1/8 HOLE 8295-837 RILL 6 1/8 HOLE 8379-8393'.	9,574.0 Com			
Time Lo Start Time 06:00 06:30 08:00 09:45	Tribal 12 33631  Dur (hr) 0.50 1.50 1.75	End Time 06:30 08:00 09:45 11:15	State/Province UT  Code 2 2 2 2 2	DRILL A	County Duchesne  Category ACTUAL ACTUAL ACTUAL ACTUAL ACTUAL	Field Name Brundag Canyon	ge /Lake SLIDE DR ROTATE SLIDE DR ROTATE	Well Status Released for Work RILL 6 1/8 HOLE 8289-8295'. DRILL 6 1/8 HOLE 8295-837 RILL 6 1/8 HOLE 8379-8393'. DRILL 6 1/8 HOLE 8393-847	9,574.0 Com			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15	Tribal 12  33631  Dur (hr) 0.50 1.50 1.75 1.50 2.25	End Time 06:30 08:00 09:45 11:15 13:30	State/Province UT  Code 2 2 2 2 2 2	DRILL A DRILL A DRILL A DRILL A	Category ACTUAL ACTUAL ACTUAL ACTUAL ACTUAL ACTUAL ACTUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR	RILL 6 1/8 HOLE 8289-8295'. DRILL 6 1/8 HOLE 8295-837 RILL 6 1/8 HOLE 8379-8393'. DRILL 6 1/8 HOLE 8393-847 RILL 6 1/8 HOLE 8474-8486'.	9,574.0 Com			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15 13:30	Tribal 12  33631  Dur (hr) 0.50 1.50 1.75 1.50 2.25 1.50	End Time 06:30 08:00 09:45 11:15 13:30 15:00	State/Province UT  Code 2 2 2 2 2	DRILL A	Category ACTUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR	Well Status Released for Work RILL 6 1/8 HOLE 8289-8295'. DRILL 6 1/8 HOLE 8295-837'. RILL 6 1/8 HOLE 8379-8393'. DRILL 6 1/8 HOLE 8474-8486'. DRILL 6 1/8 HOLE 8486-856	9,574.0 Com			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15 13:30 15:00	Tribal 12  33631  Dur (hr) 0.50 1.50 1.75 1.50 2.25 1.50 0.50	End Time 06:30 08:00 09:45 11:15 13:30 15:00 15:30	State/Province UT  Code 2 2 2 2 2 2	DRILL A LUBRIO	County Duchesne  Category ACTUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE ROTATE	Well Status Released for Work  RILL 6 1/8 HOLE 8289-8295'.  DRILL 6 1/8 HOLE 8295-837  RILL 6 1/8 HOLE 8379-8393'.  DRILL 6 1/8 HOLE 8474-8486'.  DRILL 6 1/8 HOLE 8486-856  RIG SERVICE.	9,574.0  Com  79'.  74'.			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15 13:30 15:00	Tribal 12  33631  Dur (hr)  0.50  1.50  1.75  1.50  2.25  1.50  0.50	End Time 06:30 08:00 09:45 11:15 13:30 15:00	State/Province UT  Code 2 2 2 2 2 2	DRILL A LUBRIO	Category ACTUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE ROTATE	Well Status Released for Work RILL 6 1/8 HOLE 8289-8295'. DRILL 6 1/8 HOLE 8295-837'. RILL 6 1/8 HOLE 8379-8393'. DRILL 6 1/8 HOLE 8474-8486'. DRILL 6 1/8 HOLE 8486-856	9,574.0  Com  79'.  74'.			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15 13:30 15:00 15:30	Tribal 12  33631  Dur (hr)  0.50  1.50  1.75  1.50  2.25  1.50  0.50  0.25	End Time 06:30 08:00 09:45 11:15 13:30 15:00 15:30	State/Province UT  Code 2 2 2 2 2 2 2 7	DRILL A LUBRIO	County Duchesne  Category ACTUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE ROUTINE ROTATE	Well Status Released for Work  RILL 6 1/8 HOLE 8289-8295'.  DRILL 6 1/8 HOLE 8295-837  RILL 6 1/8 HOLE 8379-8393'.  DRILL 6 1/8 HOLE 8474-8486'.  DRILL 6 1/8 HOLE 8486-856  RIG SERVICE.	9,574.0  Com  79'.  74'.  39'.			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15 13:30 15:00 15:30	Tribal 12  33631  Dur (hr)  0.50  1.50  1.50  2.25  1.50  0.50  0.25  0.25	End Time 06:30 08:00 09:45 11:15 13:30 15:00 15:30 15:45	State/Province UT  Code 2 2 2 2 2 2 2 7 2	DRILL A LUBRIO DRILL A REPAIR	County Duchesne  Category ACTUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE ROUTINE ROTATE REPLACE	Well Status Released for Work  RILL 6 1/8 HOLE 8289-8295'. DRILL 6 1/8 HOLE 8295-837 RILL 6 1/8 HOLE 8379-8393'. DRILL 6 1/8 HOLE 8474-8486'. DRILL 6 1/8 HOLE 8486-856 RIG SERVICE. DRILL 6 1/8 HOLE 8569-858	9,574.0  Com  79'.  74'.  39'.  ON.			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15 13:30 15:30 15:45 16:00	Tribal 12  33631  Dur (hr)  0.50  1.50  1.50  2.25  1.50  0.50  0.25  0.25  0.50	End Time 06:30 08:00 09:45 11:15 13:30 15:00 15:30 15:45 16:00	State/Province UT  Code 2 2 2 2 2 2 2 2 2 2 8	DRILL A EVBRICO DRILL A REPAIR DRILL A	County Duchesne  Category ACTUAL ACTU	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE ROTATE ROUTINE ROTATE REPLACE ROTATE	Well Status Released for Work  RILL 6 1/8 HOLE 8289-8295'.  DRILL 6 1/8 HOLE 8295-837'.  RILL 6 1/8 HOLE 8379-8393'.  DRILL 6 1/8 HOLE 8474-8486'.  DRILL 6 1/8 HOLE 8486-856'.  RIG SERVICE.  DRILL 6 1/8 HOLE 8569-856.  DRILL 6 1/8 HOLE 8569-856.	9,574.0  Com  79'.  39'.  ON.  6'.			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15 13:30 15:30 15:45 16:00 16:30	Tribal 12  33631  Dur (hr) 0.50 1.50 1.75 1.50 2.25 1.50 0.50 0.25 0.25 1.25	End Time 06:30 08:00 09:45 11:15 13:30 15:00 15:30 15:45 16:00 16:30 17:45	State/Province UT  Code 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	DRILL A LUBRIC DRILL A REPAIR DRILL A	County Duchesne  Category ACTUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE ROTATE ROUTINE ROTATE REPLACE ROTATE SLIDE DR	Well Status Released for Work  RILL 6 1/8 HOLE 8289-8295'. DRILL 6 1/8 HOLE 8295-837'. RILL 6 1/8 HOLE 8379-8393'. DRILL 6 1/8 HOLE 8474-8486'. DRILL 6 1/8 HOLE 8486-856'. FRIG SERVICE. DRILL 6 1/8 HOLE 8569-858. E O-RING IN MUD LINE UNIDERILL 6 1/8 HOLE 8589-861.	9,574.0  Com  79'.  39'.  ON.  6'.			
Time Lo Start Time 06:00 06:30 08:00 09:45 11:15 13:30 15:00 15:30 15:45 16:00 16:30 17:45	Tribal 12  33631  Dur (hr) 0.50 1.50 1.75 1.50 2.25 1.50 0.25 0.25 0.25 1.25	End Time 06:30 08:00 09:45 11:15 13:30 15:45 16:00 16:30 17:45 19:00	State/Province UT  Code 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	DRILL A CONTROL A DRILL A DRILL A DRILL A DRILL A DRILL A DRILL A	County Duchesne  Category ACTUAL ACTUAL ACTUAL ACTUAL ACTUAL ACTUAL CATE RIG ACTUAL CATE RIG ACTUAL CATUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE ROUTINE ROTATE REPLACE ROTATE SLIDE DR ROTATE	Released for Work  Released for Work  RILL 6 1/8 HOLE 8289-8295'.  DRILL 6 1/8 HOLE 8379-8393'.  DRILL 6 1/8 HOLE 8393-847  RILL 6 1/8 HOLE 8474-8486'.  DRILL 6 1/8 HOLE 8486-856  RIG SERVICE.  DRILL 6 1/8 HOLE 8569-858  CO-RING IN MUD LINE UNI  DRILL 6 1/8 HOLE 8589-861  RILL 6 1/8 HOLE 8589-861	9,574.0  Com  79'.  74'.  39'.  ON.  6'.			
API/UWI 43-013-3	Tribal 12  33631  Dur (hr) 0.50 1.50 1.75 1.50 2.25 1.50 0.25 0.25 0.25 1.25 1.25 1.00	End Time 06:30 08:00 09:45 11:15 13:30 15:00 15:30 15:45 16:00 16:30 17:45	State/Province UT  Code 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	DRILL A EVBRIC DRILL A REPAIR DRILL A DRILL A DRILL A DRILL A	County Duchesne  Category ACTUAL ACTUAL ACTUAL ACTUAL ACTUAL ACTUAL CATE RIG ACTUAL CATE RIG ACTUAL CATUAL	Field Name Brundag Canyon	SLIDE DR ROTATE SLIDE DR ROTATE SLIDE DR ROTATE ROUTINE ROTATE REPLACE ROTATE SLIDE DR ROTATE ROTATE ROTATE SLIDE DR ROTATE SLIDE DR	Released for Work  Released for Work  RILL 6 1/8 HOLE 8289-8295'.  DRILL 6 1/8 HOLE 8379-8393'.  DRILL 6 1/8 HOLE 8393-847  RILL 6 1/8 HOLE 8474-8486'.  DRILL 6 1/8 HOLE 8486-856  RIG SERVICE.  DRILL 6 1/8 HOLE 8569-858  CO-RING IN MUD LINE UNID  DRILL 6 1/8 HOLE 8589-861  RILL 6 1/8 HOLE 8616-8631'.  DRILL 6 1/8 HOLE 8616-8631'.	9,574.0  Com  79'.  74'.  69'.  ON.  6'.			



Time Lo													
Start Time 20:45	. ,	End Tim 22:45		DDILL		egory		CLIDE DE	NII C 4/0 LIC	N E 0750 0774	Com		
20:45		23:15	2		ACTUAL ACTUAL			SLIDE DRILL 6 1/8 HOLE 8758-8771'.  ROTATE DRILL 6 1/8 HOLE 8771-8805'.					
23:15		00:30	2		ACTUAL					DLE 8805-8820'.	J.		
00:30		03:30	2							HOLE 8820-899	61		
03:30		04:30	2							DLE 8996-9002'.	0.		
03.30		05:30	2		DRILL ACTUAL DRILL ACTUAL					HOLE 9002-906	61		
05:30		06:00	2		ACTUAL					DLE 9066-9069'.	O.		
									,				
_	Tribal 12	2H-28							8/7/2011	06:00			
43-013-3	33631		State/Province UT	ce	County Duchesne	e I	Field Name Brundag Canyon/ Canyon	е	Well Status Released fo	r Work	Total Depth (ftKB) 9,574.0	Primary Job Type Drilling & Completion	
Time Lo	•				•	'					•		
Start Time	. ,	End Tim		DDILL	Cate ACTUAL	egory		CLIDE DE	NII C 4/0 LIC	N E 0000 0070	Com		
06:00			2							LE 9069-9078'.	0'		
07:00		07:45	2		ACTUAL			_		HOLE 9078-909 DLE 9090-9098'.	U <sup>*</sup> .		
07:45		09:15	2		ACTUAL			_			<u></u>		
09:15		11:15	2		ACTUAL					HOLE 9098-918 DLE 9185-9200'.	o.		
11:15	_	13:30	2		ACTUAL								
13:30		15:45	2		ACTUAL					HOLE 9200-928	• •		
15:45		16:00	5		MUD & CII	RC 		RPM.				K STRING & ROTATE 80	
16:00		17:15	2		ACTUAL			PUMPING	SWEEP.		9'. LOST ~1200 FT/LE	3 TORQUE AFTER	
17:15		18:45	2		ACTUAL					LE 9329-9341'.			
18:45		20:00	2		ACTUAL					HOLE 9341-937	6'.		
20:00	l	21:30	2		ACTUAL					LE 9376-9388'.			
21:30	3.25	00:45	2		ACTUAL			ROTATE	DRILL 6 1/8	HOLE 9388-951	9'.		
00:45	0.50	01:15	2	1	ACTUAL			SLIDE DF	RILL 6 1/8 HC	LE 9519-9524'.			
01:15		01:30	2		ACTUAL					HOLE 9524-954			
01:30	0.25	01:45	5	COND	MUD & CII	RC		PUMP H\ HOLE DU	/ SWEEP, CI IE TO HIGH	RCULATE, REC FORQUE.	CIPROCATE & ROTAT	E 80 RPM & CLEAN	
01:45	0.75	02:30	2	DRILL A	ACTUAL					HOLE 9543-956	<del>-</del> ·		
02:30	1.25	03:45	2	DRILL A	ACTUAL			SLIDE DF	RILL 6 1/8 HC	DLE 9566-9574'.	LOST MOTOR DIFFE	ERENTIAL PRESSURE.	
03:45	0.50	04:15	20	DIRECT	ΓΙΟΝΑL W	'ORK		TROUBLE	SHOOT PR	ESSURE DIFFE	RENTIAL LOSS.		
04:15	1.75	06:00	5	COND	MUD & CII	RC			BBL SUPER TE 2X BOTT		RECIPROCATE, ROTA	ATE @ 80 RPM &	
	Tribal 12	H-28							8/8/2011	06:00			
43-013-3			State/Province UT	ce	County Duchesne	e I	Field Name Brundag Canyon/ Canyon	е	Well Status Released fo	r Work	Total Depth (ftKB) 9,574.0	Primary Job Type  Dirilling & Completion	
Start Time		End Tim	e Code		Cate	egory					Com		
06:00		06:30	5	COND	MUD & CII			CIRCULA	TE HOLE CL	EAN.			
06:30	6.50	13:00	6	TRIPS				DOWN SI	PERRY TOO	LS.	CONTINUE TO POH.	HOLE SLICK. LAY	
13:00	3.50	16:30	6	TRIPS			BIT COND: 0-0-NO-A-X-I-NO-DTF/TD.  PICK UP REAMING ASSEMBLY: BULLNOSE, FLOAT SUB, 6" WATERMELON REAMER, 3 1/2 DP PUP JT, 6" WATERMELON REAMER, 3 1/2 DP. RIH TO 7" SHOE. FILL STRING @ 4000'.						
16:30	13.25	05:45	3	REAMI	NG			REAM HORIZONTAL HOLE 6190-9574' @ 350 FPH. RE-REAM PLACES W/1000 FT/LB ABOVE NORMAL ROTATING TORQUE. PP STARTED 93 SPM @ 3450 PSI, ENDED 87 SPM @ 3500 PSI. 100 RPM. TORQUE STARTED @ 3600, ENDED @ 6800 FT/LB.					
05:45	0.25	06:00	5	COND	MUD & CII	RC		PUMP 25	BBL SUPER	SWEEP PILL 8	OU) UNTIL 8100', THE CIRCULATE HOLE O	CLEAN RECIPROCATING	
		<u> </u>						& KUIAT	ING 100 RPM	Л.			

API/UWI 13-013-3			State/Provinc UT	e	County Duchesne	Field Nam Brundag Canyon Canyon	ge /Lake	Well Status Released for Work	Total Depth (ftKB) 9,574.0	Primary Job Type Drilling & Completion		
ime Log	Dur (hr)	End Time	e Code		Category				Com			
3:00	. ,	07:15	5	COND	MUD & CIRC		CIRCUL	ATE, RECIPROCATE, ROTA				
7:15		12:00	6	TRIPS				D 2" DRIFT & POH. RECO		N REAMERS.		
2:00		15:15	111		INE LOGS			JSM W/WEATHERFORD LO				
	0.20	10.10	1.,					Y DP CONVEYED LOGGIN				
5:15	5.00	20:15	11	WIREL	INE LOGS		RIH W/W	/EATHERFORD E-LOG TO	9566'. PULL UP TO 944	0'. HOLE SLICK.		
):15		21:15	11	WIRFI	INE LOGS			OWN MESSENGER DART				
:15		01:30	11		INE LOGS			T @ 6 MIN/STAND. NO TIO				
1:30		03:30	11		INE LOGS			OM 7" SHOE.	JIII HOLL.			
3:30		05:30	11		INE LOGS		_	JSM W/LOGGERS & RIG DO	OWN LOCCING TOOLS			
					INE LOGS							
5:30		06:00	6	TRIPS				TANDEM REAMING ASSE	MBLY.			
LC T	ribal 12	H-28	-46 fka	#16-2	28-46 8/9	9/2011 0	6:00 -	8/10/2011 06:00				
1/UWI 3-013-3	3631		State/Provinc UT	е	County Duchesne	Field Nam Brundag Canyon Canyon	ge /Lake	Well Status Released for Work	Total Depth (ftKB) 9,574.0	Primary Job Type Drilling & Completion		
me Log	1								Į.			
art Time	Dur (hr)	End Tim			Category				Com			
6:00		08:30	6	TRIPS				ANDEM 6" WATERMELON				
3:30		19:15	3	REAMI				ATERAL W/100 RPM, 450 G	SPM @ 500 FPH.			
9:15	1.50	20:45	5	COND	MUD & CIRC		CIRC. SI	JPER SWEEP.				
):45	2.75	23:30	6	TRIPS			TOOH					
							2 JTS (8- (13.98), 2 SP #6 (4 DSS #7 (84.65), 3 1 JT (42 (13.93), 2 (84.59), 3 JTS (12 #16 (42.	7.05), SP #2 (42.28) 1 JT (42 4.65), DSS #3 (13.98), 2JTS 2 JTS (84.73), SP #5 (42.29) 2.31), 2 JTS ( 84.57), DSS # (13.99), 2 JTS ( 83.74), SP # SP #9 (42.33), 2 JTS (84.68 2.31), DSS #10 (13.94), 2 JT 2 JTS (84.66), SP #12 (42.3 SP #13 (42.31), 2 JTS ( 847 27.09), DSS#14 (14.04), 2 J 35), 18 JTS ( 758.46), VERS UP JT (4.94). RIG DN CAS	8 (84.65), SP #4 (42.36), 2 9, 2 JTS ( 84.65), DSS #5 96 (13.98), 1 JT SP #7 (42.86), 2 JTS ( 84.55) 90, DSS #9 ( 14.01), 3 JTS 91, 2 JTS ( 84.59), DSS #7 91, 2 JTS ( 84.59), DSS #7 91, DSS #13 13.95), 1 JT 91, DSS #13 13.95), 1 JT 91, DSS #13 HANGEF	2JTS (84.71), DSS #4 (13.98), 2 JTS ( 84.68), 2.36), 3 JTS (126.92), , DSS #8 (14.97, )2 JTS (126.36), SP #10 (42.35), , 2JTS (82.66), DSS #11 12 (13.98), 2 JTS (43.35), SP #14 9 42.37 82), 4 JTS ( 169.38) SP		
LC T	ribal 12	H-28	-46 fka State/Provinc UT	_	28-46 8/1	Field Nam Brundad	е	- 8/11/2011 06:00 Well Status Released for Work	Total Depth (ftKB)	Primary Job Type Drilling & Completion		
						Canyon	/Lake			3		
me Log					<u> </u>	Canyon						
art Time	Dur (hr)	End Time	e Code		Category				Com			
6:00	. ,	10:30	12	RUN C	ASING & CEME	NT	TIH W/ L	INER TO 9557'	2200			
0:30		11:30	5	COND	MUD & CIRC			BOTTOMS UP				
:30		15:15	12		COND MUD & CIRC RUN CASING & CEMENT			HSM, SWAP TO HES, PUMP 71 BLS DIESEL, DISPLACE W/ 102 BLS H20, DROP BALL F/ LINER HANGER WAIT 30 MINS. EXPAND HANGER TOOK 9,700 PSI. PULI TEST 80,000 OVER, DISPLACE THE REST HOLE W/ CLAY FIX WATER AND BOICIDE.				
5:15	8.75	00:00	6	TRIPS				IH, LDDP, TIH, LDDP & DC	<u> </u>			
0:00		05:15	12	_	ASING & CEME	NT	HSM, RI	G UP FRANKS AND RUN. 7 2" P110 LT&C CASING (506	ΓΙΕ BACK STRING. SEAI	_ ASSEMBLY (1.17), 120		
1 C T	ribal 12	H-28	-46 fka	#16-	28-46 8/1	1/2011	06:00	- 8/12/2011 06:00				
	IIDUI IZ	20	State/Province		County	Field Nam		Well Status	Total Depth (ftKB)	Primary Job Type		

B	Bill	Barrett	Corporation
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	pq												
tart Time		End Time	Code		Catego	ry			Com				
06:00	2.50	08:30	12	RUN CA	SING & CE	MENT	PICK UP MINS.	CASING SPACE OUT WI	TH PUP JOINTS AND LA	AND TEST TO 1000# F/			
8:30	2.00	10:30	14	NIPPLE	UP B.O.P		NIPPLE	NIPPLE DN BOP TO PUT IN SNAP RING.					
0:30	2.00	12:30	12	RUN CA	SING & CE	MENT	NOT ENOUGH WEIGHT IN PBR PICK UP CASING AND ADD1.7' PUP JOINT. MANDRELL IN WOULD NOT TEST. PICK CHECK CLEAN AND RESET STILL WOULD NOT TEST.						
12:30	4.25	16:45	12	RUN CA	SING & CE	MENT	WOOR	INGS F/ MANDRAL.					
16:45	1.25	18:00	12	RUN CA	SING & CE	MENT		OVERSIZED ORINGS. TE D 2000# F/ 10 MINS. LOST					
#LC	Tribal 12	H-28-	46 fka	#16-2	8-46	8/16/2011	06:00	- 8/17/2011 06:00					
PI/UWI 13-013-	33631	1	State/Provinc UT		County Duchesne	Field Nan Brunda Canyor Canyor	ge n/Lake	Well Status Released for Work	Total Depth (ftKB) 9,574	Primary Job Type 0 Drilling & Completion			
Time Lo		1		•									
Start Time 06:00	Dur (hr) 24.00	End Time 06:00	LOCL	Look Mo	Catego Ilhead & Se		Well bee	d secured and shut in. Con-	Com	uilding and actting up			
00.00	24.00	06.00	LOCL	Lock we	ilileau & Se	cure		on equipment. Cleared locat					
#LC	Tribal 12	H-28-	46 fka	#16-2	8-46	8/17/2011	06:00	- 8/18/2011 06:00					
API/UWI 13-013-3	33631		State/Provinc UT		County Duchesne	Field Nan Brunda		Well Status Released for Work	Total Depth (ftKB) 9.574	Primary Job Type 0 Drilling & Completion			
			01		Buomoono	Canyor Canyor	/Lake	Troisdassa for Work	3,371	o Drinning & Completion			
Time Lo		le	0.1.	1	0-1				0				
Start Time	Dur (hr) 24.00	End Time 06:00	LOCL	Lock We	Catego Ilhead & Se	·	Well sec	ured, construction crews are	Com  a currently building and s	etting up production			
							equipme		y y	annig of Freezensin			
			_										
	Tribal 12	H-28-	-46 fka	#16-2	8-46			- 8/19/2011 06:00					
API/UWI		15	-46 fka State/Provinc UT	е (	8-46 County Duchesne	8/18/2011 Field Nan Brunda Canyor Canyor	ge n/Lake	- 8/19/2011 06:00  Well Status Released for Work	Total Depth (ftKB)	Primary Job Type 0 Drilling & Completion			
API/UWI 43-013-3 <b>Time Lo</b>	33631 <b>Pg</b>		State/Provinc UT	е (	County Duchesne	Field Nan Brunda Canyor Canyor	ge n/Lake	Well Status	Total Depth (ftKB) 9,574				
API/UWI 43-013-3 Time Lo Start Time	33631 <b>Pg</b> Dur (hr)	15	State/Provinc UT	e (	County	Field Nan Brunda Canyor Canyor	ge JLake	Released for Work	Total Depth (ftKB) 9,574	0 Drilling & Completion			
API/UWI 43-013-3 Time Lo Start Time 06:00	33631 <b>Pg</b> Dur (hr)	End Time 06:00	State/Provinc UT  Code LOCL	e (	County Duchesne  Catego	Field Nan Brunda Canyor Canyor ry	ge n/Lake n Well sec equipme	Released for Work	Total Depth (ftKB) 9,574  Com e currently building and s	0 Drilling & Completion			
Time Lo Start Time 06:00  #LC API/UWI	33631  Pg  Dur (hr) 24.00  Tribal 12	End Time 06:00	State/Provinc UT  Code LOCL	Lock We	County Duchesne  Catego	Field Nan Brunda Canyor Canyor ry	Well sec equipme  06:00	Well Status Released for Work  ured, construction crews are	Com e currently building and s	0 Drilling & Completion			
Fime Lo Start Time D6:00  #LC  APPIUWI 43-013-3	33631  Pg  Dur (hr) 24.00  Tribal 12  33631	End Time 06:00	State/Provinc UT  Code LOCL LOCL  46 fka  State/Provinc UT	Lock We	County Duchesne  Catego Illhead & Se  8-46 County Duchesne	Field Nan Brunda Canyor Canyor  Ty Coure  B/19/2011  Field Nan Brunda Canyor Canyor Canyor	Well sec equipme  06:00	well Status Released for Work  ured, construction crews are nt.  - 8/20/2011 06:00	Com e currently building and s  Total Depth (ftKB) 9,574	O Drilling & Completion  etting up production  Primary Job Type			
Fime Lo Start Time D6:00  #LC  Time Lo Start Time D6:00  Fine Lo Start Time	33631  Pg	End Time 06:00	State/Provinc UT  Code LOCL LOCL  46 fka  State/Provinc UT	Lock We	Catego Ca	Field Nan Brunda Canyor Canyor  ry ccure  8/19/2011  Field Nan Brunda Canyor Canyor	Well sec equipme  06:00  ge h/Lake	well Status Released for Work  ured, construction crews are nt.  - 8/20/2011 06:00  Well Status Released for Work	Com e currently building and s  Total Depth (ftKB) 9,574  Com 9,574	O Drilling & Completion  etting up production  Primary Job Type O Drilling & Completion			
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Time Lossant Time Costant Time Lossant Time Costant Time Lossant Time Costant Time Lossant Time	33631  Pg	End Time 06:00  H-28-  End Time 06:00  H-28-	State/Provinc UT  Code LOCL LOCL  Code LOCL  Code LOCL  LOCL  LOCL  LOCL  LOCL  LOCL	Lock We Lock We Lock We	County Duchesne  Catego Illhead & Se  R-46 County Duchesne  Catego	Field Nan Brunda Canyor Canyor Try Ecure  8/19/2011  Field Nan Brunda Canyor Canyor Canyor	Well sec equipme  Multiple sec equipme  Well sec equipme  Multiple sec equipme	well Status Released for Work  ured, construction crews are nt.  - 8/20/2011 06:00  Well Status Released for Work  ured, construction crews are nt.	Com e currently building and s  Total Depth (ftKB)  9,574  Total Depth (ftKB)  9,574  Com e currently building and s	O Drilling & Completion  etting up production  Primary Job Type O Drilling & Completion			
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Time Lo Start Time O6:00  #LC  Time Lo Start Time O6:00	33631  Pg	End Time 06:00  H-28-  End Time 06:00  H-28-  End Time 06:00  H-28-	Code LOCL LOCL Code LOCL LOCL Code LOCL	Lock We Lock We Lock We Lock We Lock We	Catego	Field Nan Brunda Canyor Canyor  Ty  Ecure  B/19/2011  Field Nan Brunda Canyor Canyor  Ty  Ecure  B/20/2011  Field Nan Brunda Canyor Canyor Canyor  Ty  Caryor  Ty  Caryor  Ty  Caryor  Ty  Ty  Ty  Ty  Ty  Ty  Ty  Ty  Ty	Well sec equipme  06:00  Well sec equipme  06:00  Well sec equipme  Well sec equipme  06:00  Well sec equipme  06:00	well Status Released for Work  ured, construction crews are nt.  - 8/20/2011 06:00  Well Status Released for Work  ured, construction crews are nt.  - 8/21/2011 06:00  Well Status Released for Work	Com e currently building and s  Com 9,574  Total Depth (ftKB) 9,574  Com e currently building and s  Com e currently building and s	o Drilling & Completion  etting up production  Primary Job Type O Drilling & Completion  etting up production  Primary Job Type O Drilling & Completion			

			5	Sundry	y Numbe:	r: 18161	API We	11 Number: 43013	3336310000		
<b>(B)</b>	Bill B	arre	tt Cor	pora	ation						
Time Lo											
Start Time 06:00	Dur (hr) 24.00	End Tim 06:00	LOCL	Lock W	Catego ellhead & Se		Well shu	t in and secured. Constructi	Com	no day	
										ie uay.	
API/UWI	Tribal 12	M-28	State/Province			8/22/2011 Field Nar		- 8/23/2011 06:00	Total Depth (ftKB)		Primary Job Type
43-013-3	33631		UT	3	Duchesne	Brunda Canyo Canyo	age n/Lake	Released for Work	тотаг Беріп (пкв)	9,574.0	Drilling & Completion
Time Lo		Leuru			0-1				2		
Start Time 06:00		End Tim 06:00	LOCL	Lock W	Catego ellhead & Se		Well shu	t in and secured. Constructi	Com ion crews are wor	king on p	production equipment.
#I C 7	∟ Γribal 12	H-28	-46 fka	#16-	28-46	8/23/2011		- 8/24/2011 06:00			
API/UWI 43-013-3			State/Province		County Duchesne	Field Nar Brunda	ne age n/Lake	Well Status Released for Work	Total Depth (ftKB)	9,574.0	Primary Job Type Drilling & Completion
Time Lo									'		•
Start Time 06:00	Dur (hr)	End Tim 06:00	LOCL	Lock W	Catego ellhead & Se		Well shu	t in and secured. Constructi	Com	king on r	production equipment
	L	L								King on p	broduction equipment.
	Γribal 12	H-28						- 8/25/2011 06:00			Indiana lata Tan
API/UWI 43-013-3	33631		State/Province UT	Э	Duchesne	Field Nar Brunda Canyo Canyo	age n/Lake	Released for Work	Total Depth (ftKB)	9,574.0	Primary Job Type Drilling & Completion
Time Lo											
Start Time 06:00	Dur (hr) 12.00	End Tim 18:00	GOP	Genera	Catego I Operations	•	Cont Bu	ild Production facility	Com		
18:00		06:00	IWHD		Vellhead		ND Nigh		ac valve & Night C	ap	
#LC 1	Tribal 12	H-28	-46 fka	#16-2	28-46	8/25/2011	06:00	- 8/26/2011 06:00	)		
API/UWI 43-013-3	33631		State/Province UT	е	County Duchesne	Field Nar Brunda Canyo Canyo	age n/Lake	Well Status Released for Work	Total Depth (ftKB)	9,574.0	Primary Job Type Drilling & Completion
Time Lo					•				•		
Start Time 06:00	Dur (hr)	End Tim 06:00	LOCL	Lock W	Catego ellhead & Se		Construc	tion crews finished setting u	Com	inment	
								- 8/27/2011 06:00	· · · · · · · · · · · · · · · · · · ·	ipinent.	
API/UWI	Tribal 12	.п-20	State/Province		County	Field Nar		Well Status	Total Depth (ftKB)		Primary Job Type
43-013-3			UT	•	Duchesne	Brunda Canyo Canyo	age n/Lake	Released for Work	rotal Dopal (tate)	9,574.0	Drilling & Completion
Time Lo		Leur.			0-1				2		
06:00	Dur (hr) 24.00	End Tim 06:00	LOCL	Lock W	Catego ellhead & Se	·	equipme LC H1-2 lines and	and cleaned location, Cons nt. 7-46 installed water heat tra I place 4" water load out line or insulation.	ace lines in comple	etion pit l	Installed 8" water transfer
#LC 1	Tribal 12	H-28	-46 fka	#16-	28-46	8/27/2011	06:00	- 8/28/2011 06:00	)		
API/UWI 43-013-3	33631		State/Province	Э	County Duchesne	Field Nar Brunda Canyo Canyo	age n/Lake	Well Status Released for Work	Total Depth (ftKB)	9,574.0	Primary Job Type Drilling & Completion
Time Lo		Est.	0 0-1		0-1-	200			0		
Start Time 06:00	Dur (hr) 24.00	End Tim 06:00	LOCL	Lock W	Catego ellhead & Se	•	Well shu	t it and secured, Set flow ba	Com ack tanks and stor	age tank	s. Built containment
	200	00.00					berms ar	ound tanks.  mpletion pit on the LC- H1-		•	



			State/Provinc	e	County	Field Name	e	Well Status	Total Depth (ftKB)		Primary Job Type
43-013-3	3-013-33631 UT			Duchesne Brundaç Canyon Canyon		/Lake			9,574.0	Drilling & Completion	
Time Lo	g										
Start Time	Dur (hr)	End Time	Code		Category				Com		
06:00						Well shut in and secured, No completion work took place today.					
#LC ]	Tribal 12	H-28-	46 fka	#16-2	28-46 8/29 <i>i</i>	/2011 (	06:00	- 8/30/2011 06:0	0		
API/UWI			State/Provinc	е	County	Field Name					
	33631	1	UT		Duchesne	Brundag	e Released for Work 9,574.0 Drilling & C		Drilling & Completion		
43-013-3						Canyon/ Canyon					
43-013-3											
43-013-3	g					•					
	<u> </u>	End Time	e Code		Category			•	Com		

www.peloton.com Page 8/8 Report Printed: 9/1/2011
RECEIVED Sep. 06, 2011

				FORM O		
	STATE OF UTAH			FORM 9		
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MI		i	5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-6109		
SUNDF	RY NOTICES AND REPORTS	ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
	sals to drill new wells, significantly deepen ugged wells, or to drill horizontal laterals. I		7.UNIT or CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: LC TRIBAL 12H-28-46			
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43013336310000			
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , D		ONE NU 312-816	JMBER: 64 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL				COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNSHI	IP, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian:	: U		STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICA	TE NA	ATURE OF NOTICE, REPORT,	OR OTHER DATA		
TYPE OF SUBMISSION			TYPE OF ACTION			
	ACIDIZE	□ A	LTER CASING	☐ CASING REPAIR		
☐ NOTICE OF INTENT	☐ CHANGE TO PREVIOUS PLANS	□ c	HANGE TUBING	☐ CHANGE WELL NAME		
Approximate date work will start:	CHANGE WELL STATUS	□ c	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
✓ SUBSEQUENT REPORT	DEEPEN	_	RACTURE TREAT	□ NEW CONSTRUCTION		
Date of Work Completion: 9/25/2011	OPERATOR CHANGE	_	LUG AND ABANDON	☐ PLUG BACK		
		_				
SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	_	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION		
	REPERFORATE CURRENT FORMATION	_	IDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON		
	TUBING REPAIR	⊔ v	ENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	☐ WATER SHUTOFF	□s	I TA STATUS EXTENSION	APD EXTENSION		
	☐ WILDCAT WELL DETERMINATION	□ ₀	THER	OTHER:		
12. DESCRIBE PROPOSED OR CO	     DMPLETED OPERATIONS. Clearly show all pe	rtinent	t details including dates, depths, v	olumes, etc.		
This well had first o	gas sales on 9/25/2011 and fi	irst o	oil sales on 9/26/2011.			
			_			
				ccepted by the		
				Jtah Division of		
				, Gas and Mining		
			FOR	RECORD ONLY		
NAME (PLEASE PRINT) Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	R	TITLE Senior Permit Analyst			
SIGNATURE N/A			<b>DATE</b> 9/29/2011			
IN/A			J/ 23/ 2011			

	STATE OF UTAH		FORM 9	
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-6109	
SUNDF	RY NOTICES AND REPORTS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
	sals to drill new wells, significantly deepe igged wells, or to drill horizontal laterals.		7.UNIT or CA AGREEMENT NAME:	
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: LC TRIBAL 12H-28-46			
2. NAME OF OPERATOR: BILL BARRETT CORP		9. API NUMBER: 43013336310000		
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300, D		ONE NUMBER: 312-8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE	
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 28	P, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian	: U	STATE: UTAH	
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT	, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	☐ ACIDIZE	☐ ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME	
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	□ NEW CONSTRUCTION	
	OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK	
SPUD REPORT	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION	
Date of Spud:	☐ REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON	
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL	
✓ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	APD EXTENSION	
9/30/2011	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:	
12. DESCRIBE PROPOSED OR CO	MPLETED OPERATIONS. Clearly show all pe	ertinent details including dates, depths,	volumes, etc.	
	e September 2011 monthly of			
		•	Accepted by the	
			Utah Division of	
			il, Gas and Mining	
		FUI	R RECORD ONLY	
NAME (PLEASE PRINT) Brady Riley	PHONE NUMBER	R TITLE Permit Analyst		
SIGNATURE	303 312-8115	DATE		
N/A		10/5/2011		

LC Tri	bal 12F	1-28-4	l6 fka	16-28-	46 9/2	2/201	1 06:0	0 - 9	/3/2011 06:00			
PI/UWI 13-013-33	3631		State/Provinc Utah	.e	County Duchesne		Field Name Brundag Canyon/ Canyon	е	Well Status Released for Work	Total Depth (ftKB)	9,574.0	Primary Job Type Drilling & Completion
Time Log					l		, ,					
Start Time 06:00	Dur (hr) 24.00	End Time	e Code GOP	Gonoro	Catego I Operations	-		M/SL And	d Secured. Western Pump Fu	Com	LI Loca	tion
									·	sing Foly On LC	TII LUCAI	lion
API/UWI	bal 12F	1-28-4	State/Province		-46 9/3	3/201	1 Ub:U		/4/2011 06:00	Total Depth (ftKB)		Primary Job Type
43-013-33	3631		Utah		Duchesne		Brundag Canyon/ Canyon	е	Released for Work	Total Depth (tixe)	9,574.0	Drilling & Completion
Time Log		I E . I E			0-1					0		
Start Time 06:00	Dur (hr) 24.00	End Time	GOP	Genera	Catego I Operations			Fusina F	Poly, First Run From LC 1H To	Com D 13H Access In	Place	
LC Tri	bal 12F	I-28-4	16 fka	16-28-	46 9/9	9/201			/10/2011 06:00			
API/UWI			State/Provinc		County	<i></i>	Field Name		Well Status	Total Depth (ftKB)	П	Primary Job Type
43-013-33			Utah		Duchesne		Brundag Canyon/ Canyon		Released for Work		9,574.0	Drilling & Completion
Time Log	Dur (hr)	End Time	e Code	Т	Catego	orv				Com		
06:00	, ,	06:00	LOCL	Lock We	ellhead & S				rac tanks on location. Contine 8" road crossing.	ued filling compl	etion pit o	on the LC 1H-27-46.
	bal 12F	1-28-4				1/20			9/12/2011 06:00			
API/UWI 43-013-33			State/Provinc Utah	е	County Duchesne		Field Name Brundag Canyon/ Canyon	е	Well Status Released for Work	Total Depth (ftKB)		Primary Job Type Drilling & Completion
Time Log		I = . =:	T		2 :							
Start Time 06:00	Dur (hr) 24.00	End Time	GOP	General	Catego Operations	•		Rig-Up F	oad Crossings From 1H To 1. Fall Protection On Frac Line, k. Spot 6 Tanks On 1H And S	Truck In KCL Sli	urry, Dels	o Begin Rigging Up
LC Tri	bal 12F	1-28-4	l6 fka	16-28-	46 9/1	2/20	11 06:	00 -	9/13/2011 06:00			
API/UWI 43-013-33	3631		State/Provinc Utah	е	County Duchesne		Field Name Brundag Canyon/ Canyon	е	Well Status Released for Work	Total Depth (ftKB)	9,574.0	Primary Job Type Drilling & Completion
Time Log		I = . =:	T		2 :							
Start Time 06:00	Dur (hr) 24.00	End Time	GOP	General	Catego Operations	•		(Averag	Fill Manifold For Slurry Tanks, le Bpm Was 50 Bpm For Fill ) alve And Cross To 8500#. Fil	, N/U 4" 10K Fra	ac Valve	And Flow Cross, Test
LC Tri	bal 12F	l-28-4	6 fka	16-28-	46 9/1	8/20	11 06:	00 -	9/19/2011 06:00			
API/UWI 13-013-33	3631		State/Province Utah	.e	County Duchesne		Field Name Brundag Canyon/ Canyon	е	Well Status Released for Work	Total Depth (ftKB)	9,574.0	Primary Job Type Drilling & Completion
Time Log										-1		
Start Time 06:00	Dur (hr) 24.00	End Time 06:00	GOP	General	Catego I Operations				And Rig Up HES Frac Equipo ees, Rig Up Ball Dropper Trai		ting Fresh	h Water Pit To Maintain
LC Tri	bal 12F	1-28-4	l6 fka	16-28-	46 9/1	9/20	11 06:	00 -	9/20/2011 06:00			
API/UWI 43-013-33	3631		State/Provinc Utah	е	County Duchesne		Field Name Brundag Canyon/ Canyon	е	Well Status Released for Work	Total Depth (ftKB)	9,574.0	Primary Job Type Drilling & Completion



Start Time	Dur (hr)	End Time	Code		Category			Com
06:00		07:00	GOP	General	Operations		Control C	c Crew On Location @ 05:00. Service, And Start Equipment. Run Quality hecks On Chemicals, Sand, And Fluid. Prime - Up Chemical Pumps And HHF Test Pumps And Iron To 9000#. BackSidePump To 4000#,
07:00	0.50	07:30	SMTG	Safety M	leeting		Today, Pr	peting With All Contractors Involved With Operations. Discuss Operations For ressure Test, Job Assignments, Communication, QC For Fluids, Smoking, Red Zones, PPE.
07:30	0.17	07:40	PTST	Pressure	Test			To 4-1/2 x 7 Annulus, And Pressure Up To 2200#. Will Maintain Around ring Fracs. Equalize. SICP- 0#.
07:40	1.42	09:05	FRAC	Frac. Jol			Slowed R Volume). Pump 21; 2180#, 0. (0.5#, 1.0 3.0#). Pui Pressure gallons B	25" DSI Shifting Ball, And Displace At 20 bpm, To 1000 Gallons Before DSI. ate To 10 Bpm. Shifted DSI @ 9462', At 4325 Psi. (+ 200 Gallons Casing Had To ShutDown And Reboot Blender In Pad, Went 8500 Gals. Over Vol., # Hybor G Frac Into Interval #1, 17,900 # Short Of Designed Volume StIGP-82 Frac Gradient, Pumped 23600 # Of 100 Mesh Sand In 2 Sand Stages #), And 92000 # 20/40 Premium White Sand In 3 Sand Stages (2.0#, 2.5#, mped 2289 Bbls BWTR. 92,610 Gals. Clean Fluid. Avg. Rate 50.2 Bpm Avg. 5243 Psi. Drop 1.875" Shifting Ball, And Displace Ball @ 20 bpm To 1000 efore DSS. Slow Rate To 10 bpm. No Shift Was Seen, S/D, Drop 1.875" Ball Head, Displace Down Again, No Definitive Shift Seen At DSS @ 9236'.
09:05	2.08	11:10	FRAC	Frac. Joh	0		Pumped 3 20/40 Pre Bbls BW1 Drop 2.0" Rate To 1 Same Fas	# Hybor G Frac Into Interval #2, As Designed. ISIP- 1236#, 0.65 Frac Gradien 31300 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 151400 # emium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 3099 FR. 124,335 Gals. Clean Fluid. Avg. Rate 50.1 Bpm Avg. Pressure 3932 Psi. Shifting Ball, And Displace Ball @ 20 bpm To 700 gallons Before DSS. Slow 10 bpm, Did Not See Shift, S/D, Loaded Ball In WellHead, Displace Again In shion, Did Not See Shift, Started Pad, 4500 Gals. Into,. Shifted DSS @ 9010' Psi., 50 Bpm (+ 13385 Gallons Casing Volume).
11:10	1.83	13:00	FRAC	Frac. Joh	0		Pumped 2 20/40 Pre Bbls BW1 Drop 2.0"	# Hybor G Frac Into Interval #3, As Designed. ISIP- 1658#, 0.73 Frac Gradien 28000 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 133400 # Emium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 2862 FR. 115,191 Gals. Clean Fluid. Avg Rate 50.1 Bpm Avg. Pressure 4234 Psi. Shifting Ball, And Displace Ball @ 20 bpm To 500 gallons Before DSS. Slow 10 bpm. Shifted DSS @ 8785' At 3535 Psi. (Casing Volume).
13:00	1.00	14:00	FRAC	Frac. Joh	0		Pumped 2 20/40 Pre Bbls BW1 Drop 2.0"	# Hybor G Frac Into Interval #4, As Designed. ISIP- 3437#, 0.85 Frac Gradien 28000 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 133600 # emium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 2584 FR. 102,554 Gals. Clean Fluid. Avg Rate 50.4 Bpm Avg. Pressure 4456 Psi. Shifting Ball, And Displace Ball @ 20 bpm To 1000 gallons Before DSS. Slow 10 bpm. Shifted DSS @ 8559' At 3895 Psi. (-100 Gallons Casing Volume).
14:00	0.84	14:50	FRAC	Frac. Joh	0		Pumped 2 20/40 Pre	# Hybor G Frac Into Interval #5, As Designed. ISIP- 2332#, 0.84 Frac Gradien 26900 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 127300 # emium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 2507 FR. 99,724 Gals. Clean Fluid. Avg Rate 50.3 Bpm Avg. Pressure 4600 Psi. Secured.
14:50	15.16	06:00	LOCL	Lock We	llhead & Secure	)	Vernal. B	Pump Topped Off Fresh Water Frac Tanks, From 1H Pit. Crew Travel To rady Trucking Refilling Mountain Movers. RNI Hauling In Fresh Water To Pit, ry To KCL Slurry Tanks On Location, D&M Heating Pit To 85 Degrees. WSI ired OverNight.
_	bal 12H	I-28-4	6 fka '	16-28-	46 9/20/2			0/21/2011 06:00
API/UWI 43-013-33(	631		state/Provinc Jtah		County Duchesne	Field Name Brundaç Canyon Canyon	ge /Lake	Well Status   Total Depth (ftKB)   Primary Job Type
Time Log								· · · · · · · · · · · · · · · · · · ·
Start Time	Dur (hr)	End Time			Category			Com
06:00		06:30	GOP		Operations		Control C Pressure	c Crew On Location @ 05:00. Service, And Start Equipment. Run Quality hecks On Chemicals, Sand, And Fluid. Prime - Up Chemical Pumps And HHP Test Pumps And Iron To 9000#. BackSidePump To 4000#,
06:30	0.42	06:55	SMTG	Safety M	eeting		Today, Pr Pressure,	seting With All Contractors Involved With Operations. Discuss Operations For ressure Test, Job Assignments, Communication, QC For Fluids, Smoking, Red Zones, PPE. SICP - 500#'s. Pressure Up 4.5 X 7 Annulus To 2600#'s, Open Upto Well.



Time Lo												
Start Time 06:55	Dur (hr) 1.08	End Time	e Code FRAC	Frac. Job	Category		Drop 2.37	'5" DSS Shifting Ball, A	Cor nd Displace A		0 Gallons Before DSS.	
							Volume). # Of 100 White Sai 100,714 ( Shifting B	Mesh Sand In 2 Sand S nd In 4 Sand Stages (2. Gals. Clean Fluid. Avg. I	ith Hybor G 2: stages (0.5#, 1 0#, 2.5#, 3.0# Rate 50.4 Bpr 1/2 50 bpm To	1# System As D 1.0#), And 1274 4, 3.5#). Pumped n Avg. Pressure 1000 gallons Be	esigned. Pumped 26800 00 # 20/40 Premium d 2524 Bbls BWTR. 4488 Psi. Drop 2.5" fore DSS. Slow Rate To	
08:00	1.00	09:00	FRAC	Frac. Job			ISIP - 230	07 Psi, .84 F.G Frac In	to Interval #7	With Hybor G 2	1# System As Designed.	
								Pumped 22400 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 101800 # 20/40 Premium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 2289 Bbls BWTR. 81,563 Gals. Clean Fluid. Avg. Rate 50.5 Bpm Avg. Pressure 4394 Psi. Drop 2.625" Shifting Ball, And Displace Ball @ 50 bpm To 500 gallons Before DSS. Slow Rate To 10 bpm, Saw No Shift, 2000 Gals. Over Volume. ISDP - 1734 Psi, .74 F.G Drop Ball In Frac Tree, Saw First Ball Hit When Bringing Rate On, Shifted DSS @ 7882' At 3335 Psi (+ 2050 Gallons Casing Volume).				
09:00	1.59	10:35	FRAC	Frac. Job				Frac Into Interval #8 With Hybor G 21# System As Designed. Pumped 31200 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 151200 # 20/40 Premium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 2827 Bbls BWTR. 112,064 Gals. Clean Fluid. Avg. Rate 50.3 Bpm Avg. Pressure 4294 Psi. Drop 2.75" Shifting Ball, And Displace Ball @ 50 bpm To 500 gallons Before DSS. Slow Rate To 10 bpm, Shifted DSS @ 7657' At 4125 Psi (+ 350 Gallons Casing Volume). Down 30 Min. Waiting On Sand To Be Off Loaded.				
10:35	1.08	11:40	FRAC	Frac. Job			26800 # 0 Premium Not Go To Fluid. Avo Displace gallons B	o 3.5#, Due To Net Incr g. Rate 50.4 Bpm Avg. F	Sand Stages Stages (2.0#, ease. Pumpe Pressure 4253 d Ball Late Ma	(0.5#, 1.0#), And 2.5#, 3.0#), Cut d 2329 Bbls BW B Psi. Drop 2.879 aking Sure Flusl	d 104800 # 20/40 Sand Short 22,550#, Did TR. 93,703 Gals. Clean 5" Shifting Ball, And n Was Achievable To 500	
11:40	1.00	12:40	FRAC	Frac. Job			ISIP - 2149 Psi., .81 F.GFrac Into Interval #10 With Hybor G 21# System As Designed. Pumped 31300 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 151800 # 20/40 Premium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 2728 Bbls BWTR. 108,664 Gals. Clean Fluid. Avg. Rate 50.6 Bpm Avg. Pressure 3517 Psi. ISDP - 2303 Psi., .84 F.G WSI And Secured.					
12:40	17.33	06:00	LOCL	Lock Wellhe	ead & Secure		Vernal. B KCL Sluri	Pump Topped Off Fresh rady Trucking Refilling N y To KCL Slurry Tanks red OverNight.	Mountain Mov	ers. RNI Hauling	g In Fresh Water To Pit,	
LC Tr	ribal 12h	1-28-4	16 fka	16-28-46	9/21/20	11 06:	:00 - 9	/22/2011 06:00				
API/UWI 43-013-3	33631		State/Province Utah		nty chesne	Field Name Brundag Canyon Canyon	ge /Lake	Well Status Released for Work	Total Dep	9,574.0	Primary Job Type Drilling & Completion	
Time Lo	<u> </u>					•			•			
Start Time 06:00	Dur (hr) 0.50	End Time 06:30	GOP	General Op	Category erations		Control C	Crew On Location @ 0 hecks On Chemicals, S Test Pumps And Iron T	and, And Flui	, And Start Equi d. Prime - Up C	hemical Pumps And HHP.	
06:30	0.17	06:40	SMTG	Safety Meet	ting		Safety Meeting With All Contractors Involved With Operations. Discuss Operations For Today, Pressure Test, Job Assignments, Communication, QC For Fluids, Smoking, Pressure, Red Zones, PPE. SICP - 640#s. Pressure Up 4.5 X 7 Annulus To 2600#s, Equalize, Open Upto Well.					
06:40	1.59	08:15	FRAC	Frac. Job			Slowed R Volume). # Of 100 White Sa 86,058 G Shifting B	Mesh Sand In 2 Sand S nd In 4 Sand Stages (2. als. Clean Fluid. Avg. R all, And Displace Ball @	DSS @ 7205 Vith Hybor G 2 Stages (0.5#, 1 0#, 2.5#, 3.0# ate 50.5 Bpm 2 50 bpm To	i', At 3233 Psi. ( 21# System As I.0#), And 1029 f, 3.5#). Pumped Avg. Pressure 1000 gallons Be	- 100 Gallons Casing Designed. Pumped 22500 00 # 20/40 Premium d 2142 Bbls BWTR.	

В	ill Barrett	Corporation
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Time Log	J													
Start Time	Dur (hr)	End Time			Categor	у				Com				
08:15	1.25	09:30	FRAC	Frac. Jo	bb		ISIP - 2752 Psi, .92 F.G Frac Into Interval #12 With Hybor G 21# System As Designed. Pumped 27000 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 126500 # 20/40 Premium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 2412 Bbls BWTR. 94,918 Gals. Clean Fluid. Avg. Rate 50.5 Bpm Avg. Pressure 3936 Psi. Drop 3.280" Shifting Ball, And Displace Ball @ 50 bpm To 500 gallons Before DSS. Slow Rate To 10 Bpm Shifted DSS @ 6754' At 3972 Psi (+ 500 Gallons Casing Volume).							
09:30	1.50	11:00	FRAC	Frac. Jo	ob		Pumped: 20/40 Pre Bbls BW <sup>-</sup> Drop 3.44 Slow Rate Volume).	ISIP - 2769 Psi, .92 F.G Frac Into Interval #13 With Hybor G 21# System As Designed. Pumped 27000 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 127200 # 20/40 Premium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pumped 2473 Bbls BWTR. 97,070 Gals. Clean Fluid. Avg. Rate 49.5 Bpm Avg. Pressure 4263 Psi. Drop 3.443" Shifting Ball, And Displace Ball @ 50 bpm To 500 gallons Before DSS. Slow Rate To 10 Bpm Shifted DSS @ 6529' At 4044 Psi (+ 400 Gallons Casing Volume). Down 40 Min.Transfering Chemicals, Change Out Cable And Mag Pick-Up On Blender Discharge FlowMeter.						
11:00	1.67	12:40	FRAC	Frac. Jo	ob		Pumped 2 20/40 Pre Bbls BW Drop 3.61 Slow Rate Volume).	28 Psi, .77 F.G Frac In: 22400 # Of 100 Mesh S: emium White Sand In 4 S FR. 82,413 Gals. Clean I5" Shifting Ball, And Dis e To 10 Bpm Shifted DS Down 55 Min. OffLoadir e FlowMeter( Piece Of P	Sand In Sand S Fluid. / Isplace SS @ 6 Ing Las	2 Sand Sta Stages (2.0# Avg. Rate 5 Ball @ 50 to 303' At 356 t Load Of S	ges (0.5#, 4 4, 2.5#, 3.0# 0.7 Bpm Avopm To 500 6 Psi (+ 40	1.0#), And 102 ‡, 3.5#). Pumpe yg. Pressure 44 gallons Before 0 Gallons Casi	300 # ed 2128 461 Psi. e DSS. ng	
12:40	0.91	13:35	FRAC	Frac. Jo			ISIP - 2303 Psi, .84 F.G Frac Into Interval #15 With Hybor G 21# System A Pumped 30060 # Of 100 Mesh Sand In 2 Sand Stages (0.5#, 1.0#), And 154 20/40 Premium White Sand In 4 Sand Stages (2.0#, 2.5#, 3.0#, 3.5#). Pump Bbls BWTR. 107,471 Gals. Clean Fluid. Avg. Rate 50.7 Bpm Avg. Pressure ISDP - 2823 Psi, .93 F.G WSI And Secured, Bleed Pressure Off Annulus.						660 # ed 2758 3555 Psi.	
13:35	3.00	16:35	SRIG	Rig Up/	Down		Western Pump BlowDown Poly Line From 1H, R/D Aluminum Off Frac Line. RI MOL HES Frac Equipment. Bottom Out Fresh And Slurry Tanks, Batch Four 3td Tanks For CTU.							
	40.44													
16:35		06:00	LOCL		ellhead & Se			Secured, Finish Bottom		d Batching	Tanks.			
LC Tri	13.41 ibal 12H	I-28-4	6 fka	16-28	-46 9/2	2/2011 06	5:00 - 9	9/23/2011 06:00						
	ibal 12H	I-28-4		16-28			5:00 - 9 me age n/Lake	·		d Batching  Total Depth (ftl	(B)	Primary Job Type Drilling & Con	npletion	
LC Tri	ibal 12H 3631	I-28-4	16 fka	16-28	-46 9/2	2/2011 06 Field Nar Brunda Canyo	5:00 - 9 me age n/Lake	9/23/2011 06:00   Well Status			(B)		npletion	
LC Tri API/UWI 43-013-33  Time Log Start Time	ibal 12H 3631 J Dur (hr)	I-28-4	State/Province Utah	16-28-	Categor	<b>2/2011 06</b> Field Nar Brunda Canyor Canyor	5:00 - S	0/23/2011 06:00  Well Status   Released for Work	)	Total Depth (ftl	<sup>(B)</sup> 9,574.0	Drilling & Con		
LC Tri API/UWI 43-013-33	ibal 12H 3631 J Dur (hr)	I-28-4	I6 fka State/Province Utah	16-28-	County Duchesne	<b>2/2011 06</b> Field Nar Brunda Canyor Canyor	Coil Tubin the well. shead, Rig connecto 25,000#, blade mill	9/23/2011 06:00   Well Status	d @ 05 I crew, I I hard li ector to	Com 5:00, spotted reviewed JS ne, Filled re 5:2500 psi, sec sub & 2.8 ill. Connect	d in coil unit 6A. Rigged sel with 3% good test, p 75" CTD M	and crane, 62 up crane, P/up KCL. Made up ull tested coil cotor assembly	5 psi on injector 2" coil connector and 3.75" 4	
API/UWI 43-013-33  Time Log Start Time	ibal 12H 3631 J Dur (hr) 1.50	I-28-4	State/Province Utah	16-28-	Categori	<b>2/2011 06</b> Field Nar Brunda Canyor Canyor	connecto 25,000#, blade mill psi, good	Released for Work  Respectively contact and representations of the colleged up pump truck and representations of the colleged up pump truck and representations of the colleged up disconnect substitution tested motor.	d @ 05 l crew, I l hard li ector to lb & Cirr and m arted in te @ 1.	Com 5:00, spotter reviewed JS ne, Filled re 2 2500 psi, g c sub & 2.8 ill. Connect the hole. 0 bpm.Com	d in coil unit SA. Rigged sel with 3% good test, p 75" CTD M ed lub, pres	and crane, 62 up crane, P/up KCL. Made up ull tested coil o otor assembly ssured tested lu	5 psi on injector 2" coil connector and 3.75" 4 ub to 3000	
LC Tri API/UWI 43-013-33  Time Log Start Time 06:00	ibal 12H 3631  J Dur (hr) 1.50	End Time 07:30	State/Province Utah  Code GOP	16-28-	Categori I Operations	<b>2/2011 06</b> Field Nar Brunda Canyor Canyor	Coil Tubin the well. I head, Rig connecto 25,000#, blade mill psi, good  RIH with 5000', Co	Released for Work  Released for Work  Respectively considered to the constant of the constant	d @ 05 I crew, I I hard li ector to ector to and m red in te @ 1. I and ta crease p eturns w ble to dr	Com ::00, spotted reviewed JS ne, Filled re o 2500 psi, g o sub & 2.88 ill. Connect the hole. 0 bpm.Com g Stim slee bump rate to vith 420 psi ill through v	9,574.0  d in coil unit SA. Rigged sel with 3% god test, p 75" CTD M ed lub, pres spleted weig ve @ 6303' o 2.25 bpm, on the well vith 4.3/4" b	and crane, 62 up crane, P/up KCL. Made up ull tested coil cotor assembly ssured tested lu ght checks @ 3 open well to 3 nead. Drilled or	5 psi on injector 2" coil connector and 3.75" 4 ub to 3000	
LC Tri API/UWI 43-013-33  Time Log Start Time 06:00	1.00 2.00	End Time 07:30	State/Province Utah  Code GOP	Genera	Categorial Operations	<b>2/2011 06</b> Field Nar Brunda Canyor Canyor	Coil Tubin the well. I head, Rig connecto 25,000#, blade mill psi, good  RIH with 5000', Co	Released for Work  Released for	d @ 05 I crew, I I hard li ector to ector to and m red in te @ 1. I and ta crease p eturns w ble to dr	Com ::00, spotted reviewed JS ne, Filled re o 2500 psi, g o sub & 2.88 ill. Connect the hole. 0 bpm.Com g Stim slee bump rate to vith 420 psi ill through v	9,574.0  d in coil unit SA. Rigged sel with 3% god test, p 75" CTD M ed lub, pres spleted weig ve @ 6303' o 2.25 bpm, on the well vith 4.3/4" b	and crane, 62 up crane, P/up KCL. Made up ull tested coil cotor assembly ssured tested lu ght checks @ 3 open well to 3 nead. Drilled or	5 psi on injector 2" coil connector and 3.75" 4 ub to 3000	
LC Tri API/UWI 43-013-33  Time Log Start Time 06:00  07:30  08:30	1.50 september 1.50 s	End Time 07:30 08:30 10:30	State/Province Utah  Code GOP  TRIP  RUTB	Genera Tripping Run Tu	Categorial Operations	<b>2/2011 06</b> Field Nar Brunda Canyor Canyor	Coil Tubin the well. I head, Rig connecto 25,000#, blade mill psi, good RIH with 5000', Co Tagged s choke, m Sleeves f options, I Pooh with Secured mill was r	Released for Work  Released for	d @ 05 I crew, I I hard li ector to the & Cir and m arted in te @ 1. I and ta crease p turns w le to dr coh an	Com ::00, spotted reviewed JS ne, Filled re oc sub & 2.88 iill. Connect the hole. 0 bpm.Com g Stim slee bump rate to ith 420 psi iill through v d check mil Bled off pre out mill fron	9,574.0  d in coil unit 6A. Rigged sel with 3% ged lub, pres pleted weig we @ 6303' o 2.25 bpm, on the well with 4.3/4" b l.  essure. Disc n 3.75' to 3.	and crane, 62 up crane, P/up KCL. Made up ull tested coil o otor assembly ssured tested lu ght checks @ 3 . open well to 3 nead. Drilled or oit, called Denv	5 psi on injector 2" coil connector and 3.75" 4 ub to 3000 3000' and 50/64" in Stim er reviewed	
LC Tri API/UWI 43-013-33  Time Log Start Time 06:00  07:30  08:30	1.50 0.75	End Time 07:30  08:30  10:30  12:00  12:15	State/Province Utah  Code GOP  TRIP  RUTB	Genera Tripping Run Tu Tripping Genera	Categorial Operations  I Operations	<b>2/2011 06</b> Field Nar Brunda Canyor Canyor	Coil Tubin the well. I head, Rig connect to 25,000#, blade mill psi, good  RIH with 5000', Cc  Tagged s choke, m Sleeves f options, [ Pooh with Secured mill was r Retested  RIH with to 30/64"	Well Status Released for Work  R	d @ 05 I crew, I I hard li ector to b & Cirr and m red in te @ 1. I and ta crease p turns will to dr coh an Illhead, Swap o t, open c t, @ 61 ped 48	Com ::00, spotted reviewed JS ne, Filled re observed the hole.  0 bpm.Com g Stim slee bump rate to ith 420 psi ill through to d check mil  Bled off pre out mill fron well started 00' increase to bbls.	9,574.0  d in coil unit SA. Rigged sel with 3% opod test, professor on the well with 4.3/4" bl.  essure. Discontinuous and says a says	and crane, 62 up crane, P/up KCL. Made up ull tested coil cotor assembly ssured tested lu ght checks @ 3 open well to 3 nead. Drilled or oit, called Denv connected lub, 701". installed hole.	5 psi on injector 2" coil connector and 3.75" 4 ub to 3000 3000' and 50/64" in Stim er reviewed 3.75' junk lub,	
Time Log Start Time 06:00  07:30  08:30  10:30 12:00	1.50 0.75	End Time 07:30  08:30  10:30  12:00  12:15	State/Province Utah  Code GOP  TRIP  RUTB  TRIP  GOP	Genera Tripping Run Tu Tripping Genera	Categori Operations  I Operations	<b>2/2011 06</b> Field Nar Brunda Canyor Canyor	Coil Tubin the well. I head, Rig connecto 25,000#, blade mill psi, good RIH with 5000', Co Tagged s choke, m Sleeves f options, I Pooh with Secured mill was r Retested RIH with to 30/64" Tagged S solid @ 6	Well Status Released for Work  R	d @ 05 I crew, I I hard li ector to the & Cir and m arted in tte @ 1. I and ta crease p turns where to dr coh an  Illhead, Swap o to, open to, @ 61 ped 48 arted dr mill, co	Com ::00, spotted reviewed JS ne, Filled re po 2500 psi, go co sub & 2.88 iill. Connect the hole.  0 bpm.Com g Stim slee boump rate to ith 420 so ith 420	9,574.0  d in coil unit 6A. Rigged sel with 3% per letted weig we @ 6303' or 2.25 bpm, on the well with 4.3/4" bl.  essure. Disc n 3.75' to 3. back in the epump rate leve with 30 every	and crane, 62 up crane, P/up KCL. Made up ull tested coil o otor assembly ssured tested lu ght checks @ 3 . open well to 3 nead. Drilled or oit, called Denv connected lub, 701". installed hole. to 2.25' bpm.	5 psi on injector 2" coil connector and 3.75" 4 ub to 3000 3000' and 50/64" in Stim er reviewed 3.75' junk lub, open well	



Time Lo	.a												
Start Time	Dur (hr)	End Time	Code		Category				Com				
18:30		19:30	TRIP	Tripping			Reconnected coil connector and pull tested to 25,000#, good test. M/up 2.875" flow through valve and wash nozzle. Re Pressure tested lub connection to 3000 psi. RIH with wash nozzle assembly.						
19:30	1.00	20:30	CLN	Clean C	Out Hole		RIH with wash nozzle, Tagged @ 6306' adjusted depth for new tool length. Pulled up 1' off bottom and broke circulation @ 3 bpm with full returns. Pumped a 50 bbls polymer sweep @ 3 bpm continued to circulate 1.5 times the casing volume. Installed a inline sample catcher, Seen fine piece's of kutrite and metal shaving. Fluids returns clean up good. Shut in well and started to pull out of the hole with coil tbg.						
20:30	1.00	21:30	TRIP	Tripping	ping F		Pooh with 2" coil and wash nozzle.						
21:30	1.25	22:45	CLN	Clean C	Out Hole		index tool in returns setting do	n nozzle and P/up 3.652" WP l, RIH with junk catcher asser . Worked junk catcher and in lwn 3000# to 4000# each tim w in junk catcher.	mbly, started pump rate ndex tool down on Stim s	@ 3.0 bpm with 3.0 bpm sleeve multiple times,			
22:45	2.50	01:15	TRIP	Tripping	)		Pooh with Weatherford junk catcher BHA, secured tools lub, secured wellhead, bled off pressure on lub, broke apart junk catcher, found no piece's of kutrite or metal shaving. Called Denver to review options, will reevaluate options in the morning.						
01:15	4.75	06:00	LOCL	Lock W	ellhead & Secure		Secured	well head for the night.					
LC Tr	ibal 12F	I-28-4	6 fka	16-28-	-46 9/23/2	011 06	:00 - 9	0/24/2011 06:00					
API/UWI 43-013-3	33631		State/Provinc Jtah	ce	County Duchesne	Field Name Brundag Canyon Canyon	ge /Lake	Well Status Released for Work	Total Depth (ftKB) 9,574.0	Primary Job Type Drilling & Completion			
Time Lo			1						_				
Start Time 06:00	Dur (hr)	End Time 07:00	LOCL	Lock W	Category ellhead & Secure		Well shut	in and secured, Current We	ll pressure 420 psi Wai	ting on crew to arrive			
07:00	2.25	09:15	GOP	Genera	I Operations		Coil tbg c equipmer 1- 2.875" 1-2.875" 1-2.875" \ 1-2.875" \ 1-3.75" \ 1-3.625" \ 1-3.625" \ Rigged u in the hole	rew arrived on location, Safe tt. P/up injector head, Made to Coil Connector. disconnect sub. Motor (O sub enturi Basket. a sub. top sub. WP Shoe, b lubricator, pressure tested to e.	ty meeting with coil crew up new tool assembly,	est. Open well and started			
09:15	1.00	10:15	TRIP	Tripping	9		rate to .25 At 5100',	unk catcher assembly. open 5 bpm, with .25 bpm in return increase pump rate to 1.0 bp 20 bbls gel sweep.	s. completed weight che	cks @ 4000' and 5000',			
10:15	1.00	11:15	CLN	Clean C	Out Hole		Tagged top of sleeve section @ 6300', attempted to work through sleeve section torque up several times while working through sleeve section. Torque freed up ar was able to work through sleeve section with neutral coil weight. made 10' of hole stopped @ 6310' circualted volume to heel section. Started pulling tbg coil out of hole.						
11:15	1.00	12:15	TRIP	Tripping	9		junk catch	oil tbg out of the hole, secure ner. found chuck of kutrite an Decision was made to RIH wit	d composite material. Ca				
12:15	1.00	13:15	GOP	Genera	l Operations		Denver, Decision was made to RIH with new mill assembly.  Made up new Mill assmebly, and started in the hole.						
12.13							<u> </u>						

# Bill Barrett Corporation

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Start Time	g											
	Dur (hr)	End Time			Category			coil tbg and Drill out assembly	Com			
13:15	4.25	17:30	DOPG	Drill Ou	t Plugs		pump rate 1.5 bpm, with 2.5 bpm in returns. Ran through stim sleeve @ 6303' of see any tight spots. continued to run in the hole and tagged Stim Sleeve #2 @ 64 pump rate 1.5 bpm, with 2.5 bpm in return, RIH and Tagged Sleeve #3 @ 6761 out sleeve within 15 minutes. 250 psi on the well head, with 2.5 bpm in returns. 10 bbl gel sweep. Continued to clean and condition hole to next sleeve, tagged #4 @ 6986', 250 psi on the well, drilled through #4 sleeve in 15 minute. flow rate returns are 3 bpm, continued to RIH to #5 sleeve @ 7213'. pumped 10 bbl sweed drilled through sleeve in 9 minutes. RIH and tag #6 Sleeve @ 7437', pulled up t @ 50' fpm to wipe lateral section. completed sweep, RIH and tagged stim sleeve 7437', drilled through sleeve in 8 minutes, pumped a 10 bbls gel sweep, RIH wand BHA, continuing pump @ 2.5 bpm, Tagged Sleeve #7 @ 7657' Drilled through in 15 minutes. pumped sweep, well head pressure increase to 400 psi with 2.5 bpm wheavy sand in our returns. RIH to #8 Stim Sleeve @ 7885', Drilled up in 15 minute pumped 10 bbl sweep, well head pressure 400 psi RIH to #9 Stim Sleeve @ 81 Drilled through in 7 minutes. pumped 10 bbl sweep RIH and tagged #10 Stim S 8338'. drilled through Stim Sleeve in 14 minute, pumped 20 bbl sweep, RIH and Stim Sleeve #11 @ 8563, Pooh @ 40' fpm to 5350' wiper trip.					
17:30	2.00	19:30	TRIP	Tripping			18:33 tag	time. made wiper trip, pulled	coil to 5350' @ 40' fpm.			
19:30		21:30	DOPG	Drill Ou	t Plugs		RIH to Stim Sleeve #11 tagged @ 8563', pumped 20 bbl sweep. Drilled through minutes. wellhead pressure 300 psi. return rate @ 3.0 bpm. RIH to Stim Sleeve 8783', drilled through sleeve in 6 minutes. Well head pressure @ 320 psi. pump sweep, continued to RIH to Stim Sleeve #13 tag @ 9008'. wellhead pressure @ Drilled out Stim Sleeve in 6 minutes, Wellhead pressure @ 300 psi, return rate bpm. RIH to Stim Sleeve #14, tagged @ 9235', Wellhead pressure @ 300 psi, drilling on Stim Sleeve, drilled on sleeve for over an hour. Discuss with Denver unable to drill through sleeve, decision was made to suspend the final sleeve @ Pumped gel sweep and work coil tubing from 9235' to 9000' pumping at 2 bpm bottom up volume.					
21:30	1.00	22:30	CLN	Clean C	ean Out Hole Circulated bottoms up. while working coil from 9250' to 90 bpm in returns.					0' pumping @ 2 bpm with 3		
22:30	1.50	00:00	TRIP	Tripping	9		Pooh with	n 2" coil and BHA @ 30' fpm t	hrough the lateral section	n		
00:00	1.50	01:30	GOP	Genera	l Operations		reel dry. I	tools in lub, shut in well and b R/D lubricator and injector hea nd opened well on a 24/64 cho	ad. RDMO CTS. turned			
01:30		06:00	FBCK	Flowba		044.00	<u> </u>	Il on 30/64" choke, with 450 p	si on the well.			
API/UWI	ibal 12F	1-28-4	o rka		-46 9/24/20  County	Field Name		9/25/2011 06:00   Well Status	Total Depth (ftKB)	Primary Job Type		
		1:	State/Provinc					Released for Work		Drilling & Completion		
+3-013-3	33631		State/Provinc Utah	5	Duchesne	Brundag Canyon Canyon		Released for Work				
Time Lo	g				Duchesne	Canyon		Released for Work	.,,			
Fime Lo	<b>g</b> Dur (hr)		Utah	Flowba	Category	Canyon	/Lake		Com	nks @ 2 bpm with 300 psi		
Time Lo Start Time 06:00	<b>g</b> Dur (hr)	End Time	Utah Code		Category	Canyon	Continue on a 30/6 of locatio Total wat As of 05: Choke 30 CSG P-3 BOPH- 6 BWPH-8 BORL24 BWRL24 BWRL24 BWRL7 Total Oil- Total wat	d to flow well back through sa i4" choke. Turn well over to proven the LC 13H-21-46. er load to recover 39,562 bbl. on the LC 13H-21-46. er load to recover 39,562 bbl. on the LC 13H-21-46. in th	Com nd trap and open top ta oduction at noon. Stare	dt moving Frac tanks off		
Time Lo Start Time 06:00	<b>g</b> Dur (hr)	End Time 06:00	e Code FBCK	Flowbar	Category ck Well	Canyon	Continue on a 30/6 of locatio Total wat As of 05: Choke 30 CSG P-3 BOPH-6 BWPH-8 BORL24 BWRL24 MCF- Fla BWLTR-7 Total Oil- Total wat 2% oil, 97 Trace sai	d to flow well back through sa i4" choke. Turn well over to proven the LC 13H-21-46. er load to recover 39,562 bbl. on the LC 13H-21-46. er load to recover 39,562 bbl. on the LC 13H-21-46. in th	Com nd trap and open top ta oduction at noon. Stare	dt moving Frac tanks off		



ime Lo					
Start Time	Dur (hr)	End Time	Code	Category	Com
6:00	24.00	06:00	FBCK	Flowback Well	As of 06:00, Flowback to production equip and blowing down sand trap to open top.
					As of 05:30
					Choke 30/64
					CSG P-300
					BOPH- 18
					BWPH- 63.7
					BORL24hr- 434
					BWRL24hr-1529
					MCF- 120
					BWLTR- 33,697
					Total Oil- 552
					Total water- 5865
					28% oil, 72% water.
					Trace sand

			1				
	STATE OF UTAH		FORM 9				
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-6109				
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE				
	sals to drill new wells, significantly deepen igged wells, or to drill horizontal laterals. L		7.UNIT or CA AGREEMENT NAME:				
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: LC TRIBAL 12H-28-46				
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43013336310000				
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300, D		NE NUMBER: 12-8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE				
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 28	IP, RANGE, MERIDIAN: Township: 04.0S Range: 06.0W Meridian:	U	STATE: UTAH				
11. CHE	CK APPROPRIATE BOXES TO INDICAT	TE NATURE OF NOTICE, REPORT,	OR OTHER DATA				
TYPE OF SUBMISSION		TYPE OF ACTION					
	☐ ACIDIZE	☐ ALTER CASING	CASING REPAIR				
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME				
_	☐ CHANGE WELL STATUS	$\square$ commingle producing formations	☐ CONVERT WELL TYPE				
SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION				
	OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK				
SPUD REPORT	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION				
Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON				
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL				
✓ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	APD EXTENSION				
11/30/2011	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:				
12. DESCRIBE PROPOSED OR CO	DMPLETED OPERATIONS. Clearly show all per	tinent details including dates, depths,	volumes, etc.				
	ber 2011 Monthly Drilling Rep						
			6				
			Accepted by the Utah Division of				
			l, Gas and Mining				
		FOR	R RECORD ONLY				
NAME (DI EACE DOTAT)	BRONE MINES	TITLE					
NAME (PLEASE PRINT) Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	Permit Analyst					
SIGNATURE N/A		<b>DATE</b> 12/5/2011					



#### 

Time Lo	g				
Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	LOCL	Lock Wellhead & Secure	Open to Production
07:00	0.50	07:30	SMTG	Safety Meeting	JSA Safety Meeting
07:30	2.50	10:00	WKLL	Kill Well	Kill Well.  ND Production Tree,  NU BOP & Annular.
10:00	0.50	10:30	SRIG	Rig Up/Down	RU work floor & Tbg. equip.
10:30	6.00	16:30	TRIP	Tripping	Pull Hanger & Rita cable, RU GE sheeve to pull cable, TOOH, Lay down Submersable pump.
16:30	13.50	06:00	LOCL	Lock Wellhead & Secure	SDFN, Csg. open to production.

www.peloton.com Page 1/1 Report Printed: 12/5/2011 RECEIVED Dec. 05, 2011

	STATE OF UTAH			FORM 9
	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI	-	3	5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-6429
SUNDR	RY NOTICES AND REPORTS	ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL forn	posals to drill new wells, significantly reenter plugged wells, or to drill horiz n for such proposals.	/ deep ontal l	en existing wells below aterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: LC TRIBAL 12H-28-46
2. NAME OF OPERATOR: BILL BARRETT CORP			<b>9. API NUMBER:</b> 43013336310000	
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300	, Denver, CO, 80202		NE NUMBER: 312-8164 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1834 FSL 0344 FEL			COUNTY: DUCHESNE	
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NESE Section: 2	HIP, RANGE, MERIDIAN: 8 Township: 04.0S Range: 06.0W Mer	U	STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE N	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF  WILDCAT WELL DETERMINATION  COMPLETED OPERATIONS. Clearly show	C   C   F   F   F   S   V   C   S   V   C   C   T   All pel	_	CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER: Lease Number
The lease i	number has been updated t	.0 14		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 29, 2012
NAME (PLEASE PRINT) Venessa Langmacher	<b>PHONE NUM</b> 303 312-8172	BER	TITLE Senior Permit Analyst	
SIGNATURE N/A			<b>DATE</b> 6/28/2012	

### UNITED STATES DEPARTMENT OF THE INTERIOR

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•	-	Sec. 2	** * .	~	A TOT	•
	4	N.	4 20	eriá .	414	₩′
	70/4	3 Ne	r 18	-	U 13	,

Form 3160-4 (August 200	์ ชา	COMP	BURE	ARTME AU OF	NT OF LAND	MAN	NTERIC AGEME	NT	Γ AND L				Ex	pires: Ju	PPROVED 1004-0137 sby 31, 2010
			en il inchesione pe		EUUI	WLTE	HON R	EPOR	r and L	.0G		5. 1	Lease Seria 1420H626	No. 109	
la. Type b. Type	of Well of Completi	Oil Wei	∐ ☐ G New Well	as Well	D Dark Gyd		Other Deepen				_	6. I	f Indian, A	lottee	or Tribe Name
		Ott	icr						ig Back	Diff.	Resvr.				ment Name and No.
BILL	of Operator BARRETT (	CORPOR	ATION	E-Mail:	milnne	Contact: gan@b	MEGAN Mbarretto	FINNE( comp.com	BAN 			8. I	.case Name LC TRIBA	and W	Vell No. -28-46
and the second second		R, CO 80	202				I Pt	ı: 303-21	io. (include 19-9949	area cod	le)	9. A	PI Well N	D.	43-013-33631
	on of Wall (Fi face NES				cordan	ce with I	ederal re	quirement	s)*	·····			ALTAMON	П	Exploratory
	prod interva	l reported l	elow N	ESE 178		* M.							or Area Se	C 28	r Block and Survey 14S R6W Mer UBM
At tota	depth N	WSW 183		FWL P			M	10.2					County or 3 SUCHESN	Æ	13. State
07/07/ 18. Total	2011			98/07/20	11	-			c Complete A <b>63</b> 1 25/2011	d Ready to	Prod.	17.	Elevations 72	(DF, K 54 GL	B, RT, GL)*
		MD TVD	957 576	Õ		lug Bacl		MD TVD	952 5755 <b>576</b>	1 10	20. D	epth Bri	idge Plug S	et:	MD TVD
ODL, (	Electric & O SAMMA RA	IT, MUD				y of eac	h)			22. Was Was	well cor DST run ctional S		No No No	☐ Ye	e (Submit analysis) s (Submit analysis)
23. Casing a	nd Liner Re	cord (Repo	ort all strin				1.				outling 15	mvey.	LIAO	eg re	s (Submit analysis)
Hole Size		Grade 00 COND	Wt. (#/ft.	(M	9)	(MD)	I	Cementer Septh	Type of	Sks. & Cement	Shurr (B	y Vei. BL)	Cement	Тор*	Amount Pulled
12.25		.625 J-55	65. 36.		0	15	04 05	104 1501		70	<del> </del>	480		0	
8.75		00 P-110			0	61		6184		67		166 230		2302	
6.250	4.5	00 P-110	11;	6	6	95	74	9566							
				+					<u> </u>		4				
24. Tubing	Record								<u> </u>	<del></del>		نــــــن	<u></u>		L
Size 2.875	Depth Set (	MD) Pa	ecker Dept	(MD)	Size	De	opth Set (A	AD) P	acker Dept	h (MĐ)	Size	De	pth Set (M	D)	Packer Depth (MD)
	ing Intervals ormation	<del> </del>					6. Perfor	tion Reco	ed		·				
A)	GREEN F	RIVER	Тор	6303	Botte	9465	P	erforated		0405	Size	N	io. Holes		Perf. Status
B)									6303 TO	9465		+		SLOT	TED SLEEVES
<u>C)</u> D)			<del>,</del>												. %
	racture, Trea	tment, Cen	ent Squee	e, Etc.	*****			<u> </u>							
	Depth Interv							Aı	nount and T	ype of h	faterial				
	6:	303 TO 94	65 GREE	RIVER:	SEE T	REATME	NT STAG	ES 1 -15							
							·	<del> </del>	· · · · · · · · · · · · · · · · · · ·		·				
28 Product	ion - Interval	l-A													
Date First	Test	Hours	Test	Oil	Gar		Water	Oil Gu	witu	Gas		5.00			
Produced 09/25/2011	Date 09/29/2011	Tested 24	Production	BBL 671.0	MC		BBL 830.0	Conr. A		Gravity	,	2700ucija	m Method		
Choke Size	Tog. Press. Flwg.	Cag. Press.	24 Hr. Rate	Oil BBL	Gas		Water	Gas:Oi		Well S	letus		FLOW	S FRO	M WELL
30/64	SI	350.0		671		366 366	9BL 830	Rutio	545		wow				
28a. Produc	tion - Interva Test		im.	Tar											PEWED
Produced	Date	Hours Tested	Test Production	Oil BBL	Gas MC	F	Water BBL	Oli Gra Corr. A		Gas Guavity	,	Productio			EIVED
	Tbg. Press. Flwg. SI	Cag. Press.	24 Hr. Rate	Oil BBL	Gas MC		Water BBL	Gas:Ol Ratio		Well St	ntus	<u></u>		<del>\U6</del>	3 0 2012
(See Instructi	one and once	ros for add	though date	<u></u>			L						-Ph-	<del>ι</del> Ωil	Gas & Mining

28b. Prode	uction - Interv	al C									
Date First	Test	Hours	Test	Oil	ia	Ten.					
Produced	Date	Tested	Production	BBL.	Gas MCF	Water BBL	Oil Gravity Corr. API		Gus Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. Si	Cag. Press.	24 Hr. Rate	Off BBL	Gas MCF	Water BBL	Gas:Ofi Ratjo		Well Status		" <u></u>
28c. Produ	ection - Interv	1D	4	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
Date Pirst	Test	Hous	Test	OR	Ges	Water	Oil Guzvity		Gas		
Produced	Date	Tested	Production —	BBI.	MCF	BBL	Corr. API		Ganvity	Production Method	
Size	The Prose. Flwg. Si	Cag. Press.	24 Hr. Rato	on BBL	Gen MCP	Water BBL	Gas:Oil Ratio		Well Status		
SOLD				•	dia			L			
	ary of Porous				74		in the second second	_	31. For	nation (Log) Markers	
water 11	all important z actuding depth coveries.	ones of por interval te	osity and co sted, cushio	ntents there n used, time	of: Cored in tool open, i	tervals and a Rowing and a	II drill-stem hut-in pressures				
	Formation .		Тор	Bottom		Description	s, Contents, etc.			Name	Top Meas, Depth
liner wa packer	and stimulati	ted. Stim on sleeve	ulation siec placement	ves were u data.	ised to con	reaument E aplete well,	ales was on lata. Productio atached is swei 19' to 5280'. Th	4	MAI DOU BLA CAS	EEN RIVER HOGANY JGLAS CREEK CK SHALE STLE PEAK LAND BUTTE	1954 2469 4481 5251 5367 5876 6009 9574
TGCK OII	- Cart to beg	या कार्यासि	the lateral v	was at 528	) was :	90t HOIH 400	19° 10° 5280°. II	10			
	nclosed attach rical/Mechani			.a.\	-						
	ry Notice for 1				_	Geologic Re Core Analys	-		<ol><li>DST Repo</li><li>Other:</li></ol>	ert 4. Dire	ctional Survey
34 Thorsh	costile 4 4	- f		1:0							100 m
т. 1 ыстооу	citity that th	e roregoing	g and attache Electro	nic Submiss	ion #12186	3 Verified b	v the RLM Well	Inch	rmelia- Cont	scords (see attached instr	ections):
				For BILI	BARRET	T CORPOR	ATION, sent to	the '	Vernal		
Name (p	lease print) <u>M</u>	EGAN FII	NNEGAN	· · · · · · · · · · · · · · · · · · ·	<del></del>	<del></del>	Title PEF	RMIT	ANALYST		
Signatur		Par Michigan	<b>Submissio</b>	1			Date <u>11/0</u>	)1/20 <sup>-</sup>	11		
Title 18 U.S. of the United	.C. Section 10 1 States any fa	01 and Titl lse, fictitio	e 43 U.S.C. us or fradule	Section 121 art statemen	2, make it a Is or represe	crime for an	y person knowin any matter with	gly ar	nd willfully to jurisdiction.	make to any department	or agency

### Additional data for transaction #121863 that would not fit on the form

#### 32. Additional remarks, continued

Tubing was set 10/10/2011 after the production test date. Ther is no tubing pressure for the test date that was taken on 9/29/2011.

### Prickly Pear Unit Federal 15-8D-12-15 Completion Report Continued\*

-	44. ACID, FRAC	TURE, TREATMENT, CEMENT SO	QUEEZE, ETC. (cont.)								
	AMOUNT AND TYPE OF MATERIAL										
<u>Stage</u>	Bbls Slurry	lbs 20/40 White Sand	lbs Common 100Mesh								
1	2,195	92,000	23,600								
2	3,156	151,400	31,300								
3	2,918	133,400	28,000								
4	2,614	133,600	28,000								
5	2,539	127,300	26,900								
6	2,564	127,400	26,800								
7	2,076	101,800	22,400								
8	2,866	151,200	31,200								
9	2,373	104,800	26,800								
10	2,785	151,800	31,300								
11	2,320	102,900	22,500								
12	2,426	126.500	27.000								
13	2,477	127,200	27,000								
14	2,095	102,300	22,400								
15	2,758	154,660	30,060								

<sup>\*</sup>Depth intervals for frac information same as perforation record intervals.

Company:

**Bill Barrett Corporation** 

State:

Utah

Well Name:

LC Tribal 12H-28-46

Date:

8/8/2011

County: Duchesne

DESCRIPTION	DEPTH	
	воттом	ГОР
DSI	9474.67	9459.9
Swell Packer #1	9375.2	9332.84
DSS #1	9248.12	9234.13
Swell Packer #2	9107.08	9064.8
DSS #2	9022.52	9008.55
Swell Packer #3	8923.89	8881.5
DSS #3	8796.85	8782.87
Swell Packer #4	8698.22	8655.86
DSS #4	8571.15	8557.17
Swell Packer #5	8472.44	8430.15
DSS #5	8345.5	8331.52
Swell Packer #6	8246.84	8204.53
DSS #6	8119.96	8105.98
Swell Packer #7	8063.61	8021.25
DSS #7	7894.33	7880.34
Swell Packer #8	7796.6	7754.25
DSS #8	7669.7	7654.73
Swell Packer #9	7570.08	7527.75
DSS #9	7443.07	7429.06
Swell Packer #10	7302.12	7259.77
DSS #10	7217.46	7203.52
Swell Packer #11	7118.86	7076.5
DSS #11	6991.84	6977.91
Swell Packer #12	6893.25	6850.87
DSS #12	6766.28	6752.3
Swell Packer #13	6667.61	6625.3
DSS #13	6540.59	6526.64
Swell Packer #14	6484.29	6441.92
DSS #14	6314.83	6300.79
Swell Packer #15	6216.21	6173.89
Swell Packer #16	6004.51	5962.16

### **Bill Barrett Corp**

Duchesne County, UT (NAD 1927) Sec. 28-T4S-R6W LC Tribal #12H-28-46

Plan A Rev 2 (Lateral)

Survey: Sperry MWD Surveys (Lateral)

# **Sperry Drilling Services**Standard Report

12 August, 2011

Well Coordinates: 645,570.26 N, 2,263,231.45 E (40° 06' 07.07" N, 110° 33' 32.24" W)

Ground Level: 7,253.00 ft

Local Coordinate Origin:

Centered on Well LC Tribal #12H-28-46

Viewing Datum:

RKB 24' @ 7277.00ft (H&P 319)

TVDs to System:

N

North Reference:

True

Unit System:

API - US Survey Feet - Custom

Geodetic Scale Factor Applied Version: 2003.16 Build: 431

(ft)	Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate
Tie-On  137.00					(ft)	(ft)	(ft)	(°/100ft)
First Sperry MWD Surwey(Plict Hole) @ 137.00 ft 200.00 0.73 262.25 199.99 -0.15 -2.05 2.05 0.36 262.00 0.24 315.20 261.98 -0.11 -2.54 2.54 0.99 355.00 0.37 356.60 356.98 -0.11 -2.54 2.54 0.99 355.00 0.37 356.60 356.98 -0.11 -2.54 2.54 0.99 355.00 0.37 356.60 356.98 -0.11 -2.54 2.54 0.99 355.00 0.37 356.60 356.98 -0.11 -2.54 2.54 0.99 355.00 0.37 356.60 356.98 -0.33 -2.70 2.70 0.26 439.00 0.45 328.38 438.98 0.88 -2.89 2.89 0.25 531.00 0.43 299.75 530.98 1.36 -3.38 3.37 0.24 622.00 0.24 215.98 713.98 1.29 4.16 4.16 0.18 806.00 0.35 161.55 805.98 0.87 4.19 4.18 0.31 897.00 0.37 179.16 896.97 0.31 4.09 4.09 0.12 988.00 0.38 193.70 997.97 -0.26 4.16 4.16 0.10 1,079.00 0.48 231.17 1.078.97 -0.81 4.65 4.53 4.53 1,171.00 0.43 266.10 1,70.97 -0.81 4.65 4.53 4.53 1,171.00 0.43 266.10 1,70.97 -1.08 -5.17 5.18 0.30 1,262.00 0.42 276.14 1,261.96 -1.06 -5.65 5.85 1,356.00 0.47 244.78 1,355.96 -1.19 -6.54 6.54 0.26 1,444.00 0.67 265.23 1.443.96 -1.39 -7.38 7.38 0.32 1,554.00 1.01 276.60 1.553.95 -1.33 8.89 8.89 8.99 1,742.00 1.28 11.05 1,741.92 1.09 -10.61 10.61 10.60 1.04 1,836.00 1.05 335.30 1.835.90 2.91 -10.77 10.67 0.80 1,931.00 1.29 309.99 1,930.88 4.39 -11.95 11.93 0.59 1,931.00 1.29 309.99 1,930.88 4.39 -11.95 11.93 0.59 1,202.00 0.36 851.37 2.024.87 5.38 -12.62 12.00 0.37 2,214.00 0.86 8.90 2.307.85 6.37 -10.01 9.99 0.33 2,402.00 0.36 76.17 2.401.84 6.49 -8.74 8.72 0.90 2,025.00 0.86 1.52 7.74 2.401.84 6.49 -8.74 8.72 0.90 2,025.00 0.86 5.53 2.589.82 6.36 6.60 6.68 0.85 2,695.00 1.46 53.65 2.689.80 7.45 -9.34 4.59 -9.34 4.59 0.59 2,025.00 0.86 5.502 7.78 7.78 8.99 -3.67 7.80 7.78 0.77 8,000 0.86 5.502 7.78 7.78 8.99 -3.67 3.60 0.59 2,025.00 0.86 5.502 7.78 7.78 8.99 -3.67 3.60 0.80 1,931.00 0.29 0.89 3.27.59 3.240.47 4.529 -3.44 3.00 0.57 3,345.00 0.86 5.502 7.78 7.78 7.78 8.99 -3.67 3.60 0.50 3,345.00 0.86 5.502 7.78 7.78 8.99 -3.67 3.60 0.50 3,345.00 0.86 5.502 7.78 7.78 8.99 -3.67 3.60 0.50 3,345.00 0.86 5.502 7.78 7.78 8.99 -3.67 3.60 0.50 3,345.00 0.86 5.502 7.78 7.78 8.99 3.60 0.77 -0.23 0.37 3,722.00 0.41 8.81		0.00	0.00	0.00	0.00	0.00	0.00	0.00
First Sperry MWD Survey(Pilot Hole) & 137.00 ft 200.00 0.73 262.25 199.99 -0.15 -2.05 2.05 0.36 262.00 0.24 315.20 261.98 -0.11 -2.64 2.54 0.99 3650.0 0.37 355.60 354.98 0.33 -2.70 2.70 0.26 439.00 0.45 328.38 438.98 0.88 -2.89 2.89 0.25 531.00 0.43 299.75 530.98 1.36 -3.38 3.37 0.24 622.00 0.24 257.39 621.98 1.49 -3.86 3.86 0.38 714.00 0.24 257.39 621.98 1.49 -3.86 3.86 0.33 714.00 0.24 215.98 713.98 1.29 4.16 4.16 0.18 806.00 0.35 161.55 805.98 0.87 4.19 4.18 0.31 897.00 0.37 179.16 896.97 0.31 4.09 4.09 0.12 1.079.00 0.48 231.17 1.078.97 -0.28 4.16 4.16 0.10 1.079.00 0.48 231.17 1.078.97 -0.28 4.16 4.16 0.10 1.079.00 0.48 231.17 1.078.97 -0.28 4.16 4.16 0.30 1.262.00 0.42 276.14 1.261.96 -1.06 -5.85 5.85 0.08 1.356.00 0.47 244.78 1.355.96 -1.19 -6.54 6.54 0.26 1.444.00 0.67 286.23 1.443.96 -1.39 -7.38 7.38 7.38 0.32 1.554.00 1.01 276.60 1.553.95 -1.33 -8.98 8.99 0.34 1.648.00 1.00 322.28 1.647.93 -0.35 -1.33 -8.98 8.99 0.34 1.648.00 1.00 322.28 1.647.93 -0.59 -1.015 1.056 1.06 1.356.00 0.40 4.48.5 2.118.87 5.88 -1.26 1.077 10.76 0.80 1.393.00 1.26 2.00 0.36 333.30 1.835.90 2.91 -10.77 10.76 0.80 1.393.00 0.40 4.48.5 2.118.87 5.88 -12.62 12.90 1.03 1.931.00 1.29 309.99 1.930.88 4.39 -11.95 11.93 10.30 1.931.00 1.29 309.99 1.930.88 4.39 -11.95 11.93 10.30 1.931.00 0.40 4.48.5 2.118.87 5.88 -12.62 12.90 0.77 2.214.00 0.86 5.81.88 2.218.86 6.22 -11.19 1.16 0.60 2.779.00 0.81 55.35 2.589.92 6.36 6.60 6.58 0.59 2.025.00 0.81 55.35 2.589.92 6.36 6.22 -11.19 1.06 0.50 2.779.00 0.81 55.35 2.589.92 6.36 6.22 -11.19 1.06 0.61 2.308.00 0.94 4.95 2.118.87 5.88 -12.62 12.90 0.78 2.409.00 0.86 5.85 2.589.92 6.36 6.22 -11.19 1.06 0.61 2.308.00 0.94 3.95.93 3.341.74 1.529 3.344 3.90 -3.28 3.25 0.68 2.799.00 0.81 55.35 2.589.92 6.36 6.22 -11.99 1.06 6.58 2.799.00 0.81 55.35 2.689.82 6.36 6.22 -11.99 1.06 6.58 2.799.00 0.81 55.35 2.689.82 6.36 6.22 -11.99 1.06 6.59 3.060.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.060.00 0.86 30.37 3.389.99 3.56.90 3.56 3.88 3.73 3.00 0.75 9.58 3.061.75 12.34 2.24 2.28 2.21 2.20 0.37 3.345								
200.00 0.73 262.25 199.99					-0.06	-1.13	1.13	0.69
262.00 0.24 315.20 281.98 -0.11 2.54 2.54 0.99 3650.00 0.37 355.60 354.98 0.33 -2.70 2.70 0.26 439.00 0.45 328.38 439.98 0.88 2.89 2.89 0.25 531.00 0.43 299.75 530.98 1.36 -3.38 3.37 0.24 622.00 0.24 257.99 621.98 1.49 -3.86 3.86 3.36 0.33 714.00 0.24 257.99 621.98 1.49 -3.86 3.86 3.36 0.33 714.00 0.24 215.98 713.98 1.29 4.16 4.16 0.18 806.00 0.35 161.55 805.98 0.87 -4.19 4.18 0.31 897.00 0.37 179.16 896.97 0.31 -4.09 4.09 0.12 988.00 0.38 193.70 987.97 -0.28 4.16 4.16 1.10 1.079.00 0.48 231.17 1,079.97 -0.81 4.53 4.53 0.32 1.171.00 0.43 266.10 1,170.97 -0.81 4.53 4.53 0.32 1.171.00 0.43 266.10 1,170.97 -1.08 -5.17 5.18 0.30 1.262.00 0.42 276.14 1,261.96 -1.06 5.85 5.85 0.08 1.356.00 0.47 244.78 1,355.96 -1.19 -6.54 6.54 0.26 1.344.00 0.67 265.23 1,443.96 -1.39 -7.38 7.38 0.32 1.554.00 1.01 276.60 1,553.95 -1.33 8.98 8.99 0.34 1.848.00 1.00 322.28 1,647.93 -0.59 -10.31 10.31 0.33 1.742.00 1.28 11.05 1,741.92 1.09 -10.81 10.60 1.04 1.836.00 1.02 335.30 1,835.90 2.91 -10.77 10.76 0.80 1.931.00 1.29 309.99 1,390.88 4.39 -11.95 11.33 0.59 2.025.00 0.36 351.37 2,024.87 5.36 -12.80 12.79 1.11 2.119.00 0.40 44.85 2,118.67 5.88 -12.62 12.60 0.37 2.214.00 0.55 81.88 2,213.86 6.22 -11.69 1.06 6.58 0.56 0.86 0.36 0.36 351.37 2,024.87 5.36 -12.80 12.79 1.11 2.119.00 0.40 44.85 2,118.67 5.88 -12.62 12.60 0.37 2.249.00 0.86 13.27 2,496.83 6.27 -7.80 7.78 6.46 2.590.00 0.81 56.35 2,289.82 6.36 -8.60 6.58 0.85 2.496.00 0.86 13.27 2,496.83 6.27 -7.80 7.78 6.46 2.590.00 0.81 56.35 2,289.82 6.36 -8.60 6.58 0.85 2.797.00 1.15 27.74 2,778.78 8.99 -3.67 3.63 0.70 2.873.00 0.81 55.52 2,898.82 6.36 -8.60 6.58 0.55 3.062.00 0.05 37.75 3,3815.89 15.72 2.88 2.29 3.057 3.3456.00 0.65 19.37 3,815.89 15.72 2.88 2.99 3.057 3.3456.00 0.65 19.37 3,815.89 15.72 2.88 2.99 3.57 3.3456.00 0.65 19.37 3,815.89 15.72 2.88 2.99 3.57 3.3456.00 0.65 19.37 3,815.89 15.72 2.88 2.99 3.57 3.446.00 0.65 19.37 3,815.89 15.72 2.88 2.99 3.057 3.3100.00 0.65 10.64 4,192.68 15.51 5.55 7.17 -7.23 1.10								
355.00         0.37         355.80         354.98         0.33         2.70         2.70         0.28           439.00         0.45         328.38         439.98         0.88         2.89         2.89         0.25           531.00         0.43         229.75         530.98         1.38         3.38         3.37         0.24           622.00         0.24         257.39         621.98         1.49         -3.86         3.86         0.33           714.00         0.24         257.39         621.98         1.49         -3.86         3.86         0.33           714.00         0.24         257.39         621.98         1.49         -3.86         3.86         0.33           714.00         0.24         215.98         71.398         1.29         4.16         4.16         4.16         0.18           800.00         0.35         161.55         80.99         7         0.31         4.09         4.09         0.12           980.00         0.37         179.16         896.97         0.31         4.09         4.09         0.12           1.079.00         0.43         236.10         1.170.97         -0.28         4.16         4.16         0.10 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
439.00 0.45 328.38 438.98 0.88 -2.89 2.89 0.25 531.00 0.43 299.75 530.98 1.36 -3.38 3.37 0.24 622.00 0.24 257.39 621.98 1.36 -3.38 3.38 3.37 0.24 622.00 0.24 257.39 621.98 1.29 4.16 4.16 0.18 800.00 0.35 181.55 805.98 0.87 4.19 4.18 0.31 897.00 0.37 179.16 896.97 0.31 4.09 4.09 4.09 0.12 988.00 0.38 193.70 987.97 -0.25 4.16 4.16 0.10 1.07 1.079.00 0.48 231.17 1.078.97 -0.81 4.53 4.53 0.32 1.171.00 0.43 2261.00 1.170.97 -1.08 5.17 5.18 0.30 1.262.00 0.42 276.14 1.261.96 -1.06 5.85 5.85 0.08 1.366.00 0.47 244.78 1.365.96 -1.19 -6.54 6.54 0.26 1.444.00 0.67 255.23 1.443.96 -1.39 -7.38 7.38 0.32 1.554.00 1.01 276.60 1.553.95 -1.33 8.98 8.99 0.34 1.648.00 1.00 322.28 1.647.93 -0.59 -1.031 1.031 10.31 10.31 10.31 10.31 1.383 1.742.00 1.28 11.05 1.741.92 1.09 -1.081 10.06 1.06 1.06 1.00 322.28 1.105 1.741.92 1.09 -1.081 10.08 1.19 1.09 1.29 309.99 1.393.08 4.39 -11.95 11.93 3.69 1.29 309.99 1.393.08 4.39 -11.95 11.93 0.59 2.214.00 0.85 81.68 2.213.86 6.22 -11.69 11.66 0.61 2.20 0.36 81.83 2.248.86 6.22 -11.69 1.66 0.61 2.20 0.36 81.83 2.248.80 7.45 8.99 0.34 1.262.00 0.36 81.83 2.248.80 7.45 8.99 1.36 8.99 0.34 1.365 0.00 0.36 8361.37 2.204.87 5.38 -12.80 2.27 7.80 7.80 7.80 7.80 7.80 7.80 7.80 7.8								
531.00         0.43         299.75         530.98         1.36         -3.38         3.37         0.24           622.00         0.24         257.39         621.98         1.49         -4.16         0.16         0.18           806.00         0.35         161.55         805.98         0.87         -4.19         4.18         0.31           897.00         0.37         179.16         896.97         0.31         -4.09         4.09         0.12           988.00         0.38         193.70         967.97         -0.26         -4.16         4.16         0.10           1.079.00         0.48         231.77         1.076.97         -0.81         -4.53         4.53         0.32           1.177.00         0.43         236.10         1.170.97         -1.08         -5.17         5.18         0.30           1.262.00         0.42         276.14         1.261.96         -1.06         -5.85         5.85         0.08           1.356.00         0.47         244.78         1.355.96         -1.19         -6.64         6.54         0.26           1.444.00         0.67         285.23         1.447.93         -0.59         -1.031         1.031         1.031							2.70	0.26
622.00 0.24 257.39 621.98 1.49 -3.86 3.86 0.33 714.00 0.24 215.88 713.98 1.29 -4.16 4.16 0.18 806.00 0.35 161.55 805.98 0.87 -4.19 4.16 0.18 897.00 0.37 179.16 896.97 0.31 -4.09 4.09 0.12 988.00 0.38 193.70 967.97 -0.26 -4.16 4.16 0.10 1.079.00 0.48 231.17 1.076.97 -0.81 -4.53 0.32 1.171.00 0.43 266.10 1.170.97 -1.08 -5.17 5.18 0.30 1.262.00 0.42 276.14 1.261.96 -1.06 -5.85 5.86 0.08 1.356.00 0.47 244.78 1.355.96 -1.19 -6.54 6.54 0.26 1.444.00 0.67 265.23 1.443.96 -1.39 -7.38 7.38 0.32 1.564.00 1.01 276.60 1.555.95 -1.33 -8.88 8.99 0.34 1.648.00 1.00 322.28 1.647.93 -0.59 -1.031 10.31 0.83 1.742.00 1.28 11.05 1.741.92 1.09 -10.61 10.60 1.04 1.836.00 1.05 335.30 1.855.90 2.91 -10.77 10.76 0.80 1.931.00 1.29 309.99 1.930.88 4.39 -11.95 11.93 0.59 2.025.00 0.36 351.37 2.024.87 5.36 -12.80 12.79 1.11 2.119.00 0.40 44.85 2.118.87 5.88 -12.62 12.60 0.37 2.244.00 0.86 81.68 2.213.86 6.22 -11.69 11.66 0.61 2.308.00 1.20 86.90 2.307.85 6.37 -10.01 9.99 0.38 2.402.00 0.36 78.17 2.495.83 6.27 7.80 7.78 0.78 0.69 2.496.00 0.86 113.27 2.495.83 6.27 7.80 7.78 0.64 2.590.00 0.81 56.35 2.589.82 6.36 -6.60 6.58 0.55 2.685.00 0.59 3.426.00 0.86 13.27 2.495.83 6.27 7.80 7.78 0.64 2.590.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.362.00 0.50 3.37.99 3.438.73 15.42 -2.28 2.44 0.19 3.166.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.362.00 0.50 3.37.99 3.438.73 15.42 -2.28 2.24 2.40 0.96 3.362.00 0.50 3.343.73 15.575 13.40 -2.41 2.36 0.59 3.362.00 0.50 3.37.99 3.438.73 15.42 -2.28 2.21 2.60 0.59 3.362.00 0.50 3.36.37 3.155.75 13.40 -2.41 2.36 0.59 3.362.00 0.50 3.37.99 3.438.73 15.42 -2.28 2.21 1.29 0.77 3.360.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.362.00 0.50 3.34.74 15.29 -3.14 3.08 0.51 3.362.00 0.50 0.50 3.34.74 15.29 -3.14 3.08 0.51 3.365.00 0.50 3.34.75 15.55 13.40 -2.41 2.36 0.59 3.362.00 0.50 3.36.37 3.915.575 13.40 -2.41 2.36 0.59 3.362.00 0.50 3.37.99 3.498.60 1.55.99 -3.44 3.00 0.59 3.362.00 0.50 3.37.99 3.498.60 1.55.99 -3.44 3.00 0.59 3.362.00 0.50 3.34.85.99 1.56.60 3.88 3.37 3.35 3.00 0.75 9.2.88 3.532.								
714.00 0.24 215.98 713.98 1.29 4.1.6 4.16 0.18 806.00 0.35 161.55 805.98 0.87 4.19 4.18 0.31 897.00 0.37 179.16 896.97 0.31 4.09 4.09 0.12 988.00 0.38 193.70 987.97 0.22 4.16 4.16 4.16 0.10 1.079.00 0.48 231.17 1.078.97 0.81 4.53 4.53 4.53 0.32 1.171.00 0.43 2266.10 1.170.97 1.08 5.17 5.18 0.30 1.262.00 0.42 276.14 1.261.96 1.06 5.85 5.85 0.08 1.356.00 0.47 244.78 1.355.96 1.19 4.56 4.54 6.54 0.26 1.444.00 0.67 265.23 1.443.96 1.39 -7.38 7.38 7.38 0.32 1.554.00 1.01 276.60 1.563.95 1.33 -8.98 8.99 0.34 1.548.00 1.00 322.28 1.647.93 0.59 1.031 1.031 1.031 0.83 1.742.00 1.28 11.05 1.741.92 1.09 1.00 1.01 1.06 1.04 1.838.00 1.05 335.30 1.835.90 2.91 1.077 10.76 0.80 1.331.00 1.29 309.99 1.930.88 4.39 1.195 11.95 11.93 0.59 2.025.00 0.36 351.37 2.024.87 5.38 1.280 12.79 1.11 0.279.00 0.36 351.37 2.024.87 5.38 1.262 12.60 0.37 2.214.00 0.85 81.68 2.213.86 6.22 11.69 11.66 0.61 2.308.00 0.86 113.27 2.495.83 6.27 -7.80 7.78 0.64 2.590.00 0.81 53.52 2.598.82 6.36 -6.60 6.58 0.85 2.585.00 0.81 53.52 2.585.00 0.81 55.52 2.587.77 1.049 -3.28 3.25 0.68 2.260 0.86 350.27 3.155.75 1.34 0.24 1.59 3.35.00 0.81 55.52 2.587.77 1.049 -3.28 3.25 0.68 2.260 0.86 350.27 3.155.75 1.34 0.24 1.26 2.26 2.21 1.21 3.33.00 0.86 350.27 3.55.75 1.34 0.24 1.35 0.29 1.35 0.29 1.35 0.36 0.36 350.27 3.55.75 1.34 0.24 1.26 0.26 0.37 7.78 0.64 2.590.00 0.86 350.27 3.75.75 1.34 0.24 1.26 0.26 0.37 7.78 0.64 2.590.00 0.86 350.27 3.75.75 1.34 0.24 1.26 2.26 2.21 1.21 3.353.00 0.06 3.35.37 3.34 3.34 5.34 3.34 3.34 3.34 3.34 3.34								
896.00 0.35 161.55 805.98 0.67 4.19 4.18 0.31 897.00 0.37 179.16 896.97 0.31 4.09 4.09 0.12 988.00 0.38 193.70 987.97 -0.28 -4.16 4.16 0.10 1.079.00 0.48 231.17 1.078.97 -0.81 4.53 4.53 0.32 1.171.00 0.43 266.10 1.170.97 -1.08 -5.17 5.18 0.30 1.262.00 0.42 276.14 1.261.96 -1.06 -5.85 5.85 0.08 1.366.00 0.47 244.78 1.355.96 -1.19 -6.54 6.54 0.26 1.444.00 0.67 265.23 1.443.96 -1.39 -7.38 7.38 7.38 0.32 1.554.00 1.01 276.60 1.563.95 -1.33 -8.98 8.99 0.34 1.648.00 1.00 322.28 1.647.93 -0.59 -10.31 10.31 0.33 1.742.00 1.28 11.05 1.741.92 1.09 -10.61 10.60 1.04 1.836.00 1.05 335.30 1.835.90 2.91 -10.77 10.76 0.80 1.931.00 1.29 309.99 1.930.88 4.39 -11.95 11.93 0.59 2.025.00 0.36 351.37 2.024.87 5.36 -12.60 12.79 1.11 2.119.00 0.40 44.85 2.118.87 5.88 -12.62 12.60 0.37 2.241.00 0.36 78.17 2.401.84 6.49 -8.74 8.72 0.90 2.496.00 0.86 113.27 2.495.83 6.22 -11.69 11.66 0.61 2.308.00 1.20 86.90 2.307.85 6.37 -10.01 9.99 0.38 2.402.00 0.36 78.17 2.401.84 6.49 -8.74 8.72 0.90 2.496.00 0.86 113.27 2.495.83 6.27 -7.80 7.78 0.64 2.596.00 0.81 56.35 2.589.82 6.36 -6.60 6.58 0.85 2.865.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.86 350.27 3.155.75 13.40 -2.41 2.36 0.59 3.260.00 0.66 91.37 3.815.69 15.75 2.28 2.28 2.29 2.21 1.21 3.353.00 0.66 91.37 3.915.69 15.76 2.28 2.28 2.29 2.21 1.21 3.353.00 0.66 91.37 3.915.69 15.76 2.88 2.99 3.57 3.360.00 0.71 7.34 4.004.69 15.78 4.55 5.9 4.59 4.59 0.42 4.287.00 1.1								0.33
897.00 0.37 179.16 896.97 0.31 4.09 4.09 0.12 988.00 0.38 193.70 987.97 -0.28 4.16 4.16 0.10 1.079.00 0.48 231.17 1.078.97 -0.81 4.53 4.53 0.32 1.1771.00 0.43 266.10 1.170.97 -1.08 -5.17 5.18 0.30 1.262.00 0.42 276.14 1.261.96 -1.06 5.85 5.85 0.08 1.356.00 0.47 244.78 1.355.96 -1.19 -6.54 6.54 0.26 1.356.00 0.47 244.78 1.355.96 -1.19 -6.54 6.54 0.26 1.444.00 0.67 265.23 1.443.96 -1.33 -8.98 8.99 0.34 1.564.00 1.01 276.60 1.553.95 -1.33 8.98 8.99 0.34 1.648.00 1.00 322.28 1.647.93 -0.59 -10.31 10.31 0.83 1.742.00 1.28 11.05 1.741.92 1.09 -10.61 10.60 1.04 1.836.00 1.05 335.30 1.835.90 2.91 -10.77 10.76 0.80 1.391.00 1.29 309.99 1.930.88 4.39 -11.95 11.93 0.59 2.025.00 0.36 351.37 2.024.87 5.36 -12.80 12.79 1.11 2.119.00 0.40 44.85 2.118.87 5.88 -12.62 12.60 0.37 2.214.00 0.85 81.68 2.213.86 6.22 -11.69 11.66 0.61 2.308.00 1.20 86.90 2.307.85 6.37 -10.01 9.99 0.38 2.402.00 0.36 76.17 2.401.84 6.49 -8.74 8.72 0.90 2.496.00 0.86 113.27 2.494.83 6.27 -7.80 7.78 0.64 2.590.00 0.81 56.35 2.589.82 6.36 -6.60 6.58 0.85 2.685.00 0.44 53.65 2.684.80 7.45 -5.07 5.04 0.89 2.779.00 1.15 27.74 2.778.78 8.99 -3.67 3.63 0.70 2.873.00 0.81 355.32 2.872.77 10.49 -3.28 3.25 0.88 2.988.00 0.64 330.6 2.967.76 11.57 -3.00 2.98 0.59 3.062.00 0.50 27.58 3.061.75 12.34 -2.48 2.44 0.19 3.156.00 0.86 350.27 3.155.76 13.40 -2.41 2.36 0.59 3.062.00 0.50 27.58 3.061.75 12.34 -2.48 2.44 0.19 3.156.00 0.86 350.27 3.155.76 13.40 -2.41 2.36 0.59 3.062.00 0.50 27.58 3.061.75 12.34 -2.48 2.44 0.19 3.156.00 0.87 3.355.00 0.89 327.59 3.249.74 14.57 -2.88 2.28 2.26 2.21 1.21 3.533.00 0.75 92.58 3.532.72 15.29 -0.78 0.77 0.72 0.35 3.062.00 0.50 0.75 92.58 3.532.72 15.29 -0.78 0.77 0.23 0.35 3.060.00 0.71 73.34 4.004.69 15.78 4.51 4.59 0.44 4.89.00 0.86 130.07 0.390.69 15.66 3.68 3.69 3.73 0.35 4.005.00 0.71 173.34 4.004.69 15.78 4.51 4.59 0.44 4.89.00 0.65 16.60 4.192.68 15.51 5.94 -5.59 0.44 4.287.00 1.12 0.05 4.266.67 15.65 7.17 7.72.3 1.10						<del>-4</del> .16	4.16	0.18
988.00			161.55	805.98	0.87	<del>-4</del> .19	4.18	0.31
1,079.00					0.31	-4.09	4.09	0.12
1,171.00				987.97	-0.28	-4.16	4.16	0.10
1,262.00         0.42         276.14         1,261.96         -1.06         -5.85         5.85         0.08           1,356.00         0.47         244.78         1,355.96         -1.19         -6.54         6.54         0.26           1,444.00         0.67         265.23         1,443.96         -1.39         -7.38         7.38         0.32           1,554.00         1.01         276.60         1,553.95         -1.33         -8.98         8.99         0.34           1,648.00         1.00         322.28         1,647.93         -0.59         -10.31         10.31         0.83           1,742.00         1.28         11.05         1,741.92         1.09         -10.61         10.60         1.04           1,836.00         1.05         335.30         1,835.90         2.91         -10.77         10.76         0.80           1,931.00         1.29         309.99         1,930.88         4.39         -11.95         11.93         0.59           2,025.00         0.36         351.37         2,024.87         5.36         -12.80         12.79         1.11           2,119.00         0.40         44.85         2,118.87         5.88         -12.62         0.01					-0.81	-4.53	4.53	
1,356.00						-5.17	5.18	0.30
1,444.00	1,262.00	0.42	276.14	1,261.96	-1.06	-5.85	5.85	0.08
1,554.00	1,356.00	0.47	244.78	1,355.96	-1.19	-6.54	6.54	0.26
1,648.00         1.00         322.28         1,647.93         -0.59         -10.31         10.31         0.83           1,742.00         1.28         11.05         1,741.92         1.09         -10.61         10.60         1.04           1,836.00         1.05         335.30         1,835.90         2.91         -10.77         10.76         0.80           1,931.00         1.29         309.99         1,930.88         4.39         -11.95         11.93         0.59           2,025.00         0.36         351.37         2,024.87         5.36         -12.80         12.79         1.11           2,119.00         0.40         44.85         2,118.87         5.88         -12.62         12.60         0.37           2,214.00         0.85         81.68         2,213.86         6.22         -11.69         11.66         0.61           2,308.00         1.20         86.90         2,307.85         6.37         -10.01         9.99         0.38           2,402.00         0.36         78.17         2,401.84         6.49         -8.74         8.72         0.90           2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78		0.67	265.23	1,443.96	-1.39	-7.38	7.38	0.32
1,648.00         1.00         322.28         1,647.93         -0.59         -10.31         10.31         0.83           1,742.00         1.28         11.05         1,741.92         1.09         -10.61         10.60         1.04           1,836.00         1.05         335.30         1,835.90         2.91         -10.77         10.76         0.80           1,931.00         1.29         309.99         1,930.88         4.39         -11.95         11.93         0.59           2,025.00         0.36         351.37         2,024.87         5.36         -12.80         12.79         1.11           2,119.00         0.40         44.85         2,118.87         5.88         -12.62         12.60         0.37           2,214.00         0.85         81.68         2,213.86         6.22         -11.69         11.66         0.61           2,308.00         1.20         86.90         2,307.85         6.37         -10.01         9.99         0.38           2,402.00         0.36         78.17         2,491.84         6.49         -8.74         8.72         0.90           2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78	1,554.00	1.01	276.60	1,553.95	-1.33	-8.98		0.34
1,742.00         1.28         11.05         1,741.92         1.09         -10.61         10.60         1.04           1,836.00         1.05         335.30         1,835.90         2.91         -10.77         10.76         0.80           1,931.00         1.29         309.99         1,930.88         4.39         -11.95         11.93         0.59           2,025.00         0.36         351.37         2,024.87         5.36         -12.80         12.79         1.11           2,119.00         0.40         44.85         2,118.87         5.88         -12.62         12.60         0.37           2,214.00         0.85         81.68         2,213.86         6.22         -11.69         11.66         0.61           2,308.00         1.20         86.90         2,307.85         6.37         -10.01         9.99         0.38           2,402.00         0.36         78.17         2,401.84         6.49         -8.74         8.72         0.90           2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78         0.64           2,590.00         0.81         56.35         2,589.82         6.36         -6.60         6.58         <	1,648.00	1.00	322.28	1,647.93	-0.59	-10.31		
1,931.00       1.29       309.99       1,930.88       4.39       -11.95       11.93       0.59         2,025.00       0.36       351.37       2,024.87       5.36       -12.80       12.79       1.11         2,119.00       0.40       44.85       2,118.87       5.88       -12.62       12.60       0.37         2,214.00       0.85       81.68       2,213.86       6.22       -11.69       11.66       0.61         2,308.00       1.20       86.90       2,307.85       6.37       -10.01       9.99       0.38         2,402.00       0.36       78.17       2,401.84       6.49       -8.74       8.72       0.90         2,496.00       0.86       113.27       2,495.83       6.27       -7.80       7.78       0.64         2,590.00       0.81       56.35       2,589.82       6.36       -6.60       6.58       0.85         2,685.00       1.46       53.65       2,684.80       7.45       -5.07       5.04       0.69         2,779.00       1.15       27.74       2,778.78       8.99       -3.67       3.63       0.70         2,873.00       0.81       355.32       2,872.77       10.49       -3	1,742.00	1.28	11.05	1,741.92	1.09	-10.61	10.60	
1,931.00       1.29       309.99       1,930.88       4.39       -11.95       11.93       0.59         2,025.00       0.36       351.37       2,024.87       5.36       -12.80       12.79       1.11         2,119.00       0.40       44.85       2,118.87       5.88       -12.62       12.60       0.37         2,214.00       0.85       81.68       2,213.86       6.22       -11.69       11.66       0.61         2,308.00       1.20       86.90       2,307.85       6.37       -10.01       9.99       0.38         2,402.00       0.36       78.17       2,401.84       6.49       -8.74       8.72       0.90         2,496.00       0.86       113.27       2,495.83       6.27       -7.80       7.78       0.64         2,590.00       0.81       56.35       2,589.82       6.36       -6.60       6.58       0.85         2,685.00       1.46       53.65       2,684.80       7.45       -5.07       5.04       0.69         2,779.00       1.15       27.74       2,778.78       8.99       -3.67       3.63       0.70         2,873.00       0.81       355.32       2,872.77       10.49       -3	1,836.00	1.05	335.30	1,835.90	2.91	-10.77	10.76	0.80
2,025.00         0.36         351.37         2,024.87         5.36         -12.80         12.79         1.11           2,119.00         0.40         44.85         2,118.87         5.88         -12.62         12.60         0.37           2,214.00         0.85         81.68         2,213.86         6.22         -11.69         11.66         0.61           2,308.00         1.20         86.90         2,307.85         6.37         -10.01         9.99         0.38           2,402.00         0.36         78.17         2,401.84         6.49         -8.74         8.72         0.90           2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78         0.64           2,590.00         0.81         56.35         2,589.82         6.36         -6.60         6.58         0.85           2,685.00         1.46         53.65         2,684.80         7.45         -5.07         5.04         0.69           2,779.00         1.15         27.74         2,778.78         8.99         -3.67         3.63         0.70           2,873.00         0.81         355.32         2,872.77         10.49         -3.28         3.25         0.6	1,931.00	1.29	309.99	1,930.88	4.39			
2,119.00         0.40         44.85         2,118.87         5.88         -12.62         12.60         0.37           2,214.00         0.85         81.68         2,213.86         6.22         -11.69         11.66         0.61           2,308.00         1.20         86.90         2,307.85         6.37         -10.01         9.99         0.38           2,402.00         0.36         78.17         2,401.84         6.49         -8.74         8.72         0.90           2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78         0.64           2,590.00         0.81         56.35         2,589.82         6.36         -6.60         6.58         0.85           2,685.00         1.46         53.65         2,684.80         7.45         -5.07         5.04         0.69           2,779.00         1.15         27.74         2,778.78         8.99         -3.67         3.63         0.70           2,873.00         0.81         355.32         2,872.77         10.49         -3.28         3.25         0.68           2,968.00         0.64         39.06         2,967.76         11.57         -3.00         2.96         0.59<	2,025.00		351.37					
2,214.00         0.85         81.68         2,213.86         6.22         -11.69         11.66         0.61           2,308.00         1.20         86.90         2,307.85         6.37         -10.01         9.99         0.38           2,402.00         0.36         78.17         2,401.84         6.49         -8.74         8.72         0.90           2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78         0.64           2,590.00         0.81         56.35         2,589.82         6.36         -6.60         6.58         0.85           2,685.00         1.46         53.65         2,684.80         7.45         -5.07         5.04         0.69           2,779.00         1.15         27.74         2,778.78         8.99         -3.67         3.63         0.70           2,873.30         0.81         355.32         2,872.77         10.49         -3.28         3.25         0.68           2,968.00         0.64         39.06         2,967.76         11.57         -3.00         2.96         0.59           3,062.00         0.50         27.58         3,061.75         12.34         -2.48         2.44         0.19 </td <td>2,119.00</td> <td>0.40</td> <td>44.85</td> <td></td> <td></td> <td></td> <td></td> <td></td>	2,119.00	0.40	44.85					
2,402.00         0.36         78.17         2,401.84         6.49         -8.74         8.72         0.90           2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78         0.64           2,590.00         0.81         56.35         2,589.82         6.36         -6.60         6.58         0.85           2,685.00         1.46         53.65         2,684.80         7.45         -5.07         5.04         0.69           2,779.00         1.15         27.74         2,778.78         8.99         -3.67         3.63         0.70           2,873.00         0.81         355.32         2,872.77         10.49         -3.28         3.25         0.68           2,968.00         0.64         39.06         2,967.76         11.57         -3.00         2.96         0.59           3,062.00         0.50         27.58         3,061.75         12.34         -2.48         2.44         0.19           3,156.00         0.86         350.27         3,155.75         13.40         -2.41         2.36         0.59           3,250.00         0.69         327.59         3,249.74         14.57         -2.83         2.78         0.37<	2,214.00		81.68					
2,402.00         0.36         78.17         2,401.84         6.49         -8.74         8.72         0.90           2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78         0.64           2,590.00         0.81         56.35         2,589.82         6.36         -6.60         6.58         0.85           2,685.00         1.46         53.65         2,684.80         7.45         -5.07         5.04         0.69           2,779.00         1.15         27.74         2,778.78         8.99         -3.67         3.63         0.70           2,873.00         0.81         355.32         2,872.77         10.49         -3.28         3.25         0.68           2,968.00         0.64         39.06         2,967.76         11.57         -3.00         2.96         0.59           3,062.00         0.50         27.58         3,061.75         12.34         -2.48         2.44         0.19           3,156.00         0.86         350.27         3,155.75         13.40         -2.41         2.36         0.59           3,250.00         0.69         327.59         3,249.74         14.57         -2.83         2.78         0.37<	2,308.00	1.20	86.90	2,307.85	6.37	-10.01	9.99	0.38
2,496.00         0.86         113.27         2,495.83         6.27         -7.80         7.78         0.64           2,590.00         0.81         56.35         2,589.82         6.36         -6.60         6.58         0.85           2,685.00         1.46         53.65         2,684.80         7.45         -5.07         5.04         0.69           2,779.00         1.15         27.74         2,778.78         8.99         -3.67         3.63         0.70           2,873.00         0.81         355.32         2,872.77         10.49         -3.28         3.25         0.68           2,968.00         0.64         39.06         2,967.76         11.57         -3.00         2.96         0.59           3,062.00         0.50         27.58         3,061.75         12.34         -2.48         2.44         0.19           3,156.00         0.86         350.27         3,155.75         13.40         -2.41         2.36         0.59           3,250.00         0.69         327.59         3,249.74         14.57         -2.83         2.78         0.37           3,435.00         0.28         0.62         3,344.74         15.29         -3.14         3.08         0.51<	2,402.00	0.36	78.17	2,401.84	6.49	-8.74		
2,590.00         0.81         56.35         2,589.82         6.36         -6.60         6.58         0.85           2,685.00         1.46         53.65         2,684.80         7.45         -5.07         5.04         0.69           2,779.00         1.15         27.74         2,778.78         8.99         -3.67         3.63         0.70           2,873.00         0.81         355.32         2,872.77         10.49         -3.28         3.25         0.68           2,968.00         0.64         39.06         2,967.76         11.57         -3.00         2.96         0.59           3,062.00         0.50         27.58         3,061.75         12.34         -2.48         2.44         0.19           3,156.00         0.86         350.27         3,155.75         13.40         -2.41         2.36         0.59           3,250.00         0.69         327.59         3,249.74         14.57         -2.83         2.78         0.37           3,345.00         0.28         0.62         3,344.74         15.29         -3.14         3.08         0.51           3,439.00         1.07         96.69         3,438.73         15.42         -2.26         2.21         1.21<	2,496.00	0.86	113.27	2,495.83	6.27	-7.80	7.78	
2,685.00         1.46         53.65         2,684.80         7.45         -5.07         5.04         0.69           2,779.00         1.15         27.74         2,778.78         8.99         -3.67         3.63         0.70           2,873.00         0.81         355.32         2,872.77         10.49         -3.28         3.25         0.68           2,968.00         0.64         39.06         2,967.76         11.57         -3.00         2.96         0.59           3,062.00         0.50         27.58         3,061.75         12.34         -2.48         2.44         0.19           3,156.00         0.86         350.27         3,155.75         13.40         -2.41         2.36         0.59           3,250.00         0.69         327.59         3,249.74         14.57         -2.83         2.78         0.37           3,345.00         0.28         0.62         3,344.74         15.29         -3.14         3.08         0.51           3,439.00         1.07         96.69         3,438.73         15.42         -2.26         2.21         1.21           3,533.00         0.75         92.58         3,532.72         15.29         -0.78         0.72         0.35	2,590.00	0.81	56.35	2,589.82	6.36	-6.60	6.58	
2,873.00       0.81       355.32       2,872.77       10.49       -3.28       3.25       0.68         2,968.00       0.64       39.06       2,967.76       11.57       -3.00       2.96       0.59         3,062.00       0.50       27.58       3,061.75       12.34       -2.48       2.44       0.19         3,156.00       0.86       350.27       3,155.75       13.40       -2.41       2.36       0.59         3,250.00       0.69       327.59       3,249.74       14.57       -2.83       2.78       0.37         3,345.00       0.69       327.59       3,249.74       14.57       -2.83       2.78       0.37         3,439.00       1.07       96.69       3,438.73       15.42       -2.26       2.21       1.21         3,533.00       0.75       92.58       3,532.72       15.29       -0.78       0.72       0.35         3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,722.00       1.14       77.18       3,721.70       15.53       1.43       -1.49       0.77         3,816.00       0.65       91.37       3,815.69       15.72       2	2,685.00	1.46	53.65	2,684.80	7.45	-5.07	5.04	
2,968.00       0.64       39.06       2,967.76       11.57       -3.00       2.96       0.59         3,062.00       0.50       27.58       3,061.75       12.34       -2.48       2.44       0.19         3,156.00       0.86       350.27       3,155.75       13.40       -2.41       2.36       0.59         3,250.00       0.69       327.59       3,249.74       14.57       -2.83       2.78       0.37         3,345.00       0.28       0.62       3,344.74       15.29       -3.14       3.08       0.51         3,439.00       1.07       96.69       3,438.73       15.42       -2.26       2.21       1.21         3,533.00       0.75       92.58       3,532.72       15.29       -0.78       0.72       0.35         3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,816.00       0.65       91.37       3,815.69       15.72       2.88       -2.93       0.57         3,910.00       0.33       100.09       3,909.69       15.66       3.68       -3.73       0.35         4,005.00       0.71       73.34       4,004.69       15.78       4.5			27.74	2,778.78	8.99	-3.67	3.63	0.70
3,062.00       0.50       27.58       3,061.75       12.34       -2.48       2.44       0.19         3,156.00       0.86       350.27       3,155.75       13.40       -2.41       2.36       0.59         3,250.00       0.69       327.59       3,249.74       14.57       -2.83       2.78       0.37         3,345.00       0.28       0.62       3,344.74       15.29       -3.14       3.08       0.51         3,439.00       1.07       96.69       3,438.73       15.42       -2.26       2.21       1.21         3,533.00       0.75       92.58       3,532.72       15.29       -0.78       0.72       0.35         3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,722.00       1.14       77.18       3,721.70       15.53       1.43       -1.49       0.77         3,816.00       0.65       91.37       3,815.69       15.72       2.88       -2.93       0.57         3,910.00       0.33       100.09       3,909.69       15.66       3.68       -3.73       0.35         4,005.00       0.71       73.34       4,004.69       15.78       4.5			355.32	2,872.77	10.49	-3.28	3.25	0.68
3,156.00       0.86       350.27       3,155.75       13.40       -2.41       2.36       0.59         3,250.00       0.69       327.59       3,249.74       14.57       -2.83       2.78       0.37         3,345.00       0.28       0.62       3,344.74       15.29       -3.14       3.08       0.51         3,439.00       1.07       96.69       3,438.73       15.42       -2.26       2.21       1.21         3,533.00       0.75       92.58       3,532.72       15.29       -0.78       0.72       0.35         3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,722.00       1.14       77.18       3,721.70       15.53       1.43       -1.49       0.77         3,816.00       0.65       91.37       3,815.69       15.72       2.88       -2.93       0.57         3,910.00       0.33       100.09       3,909.69       15.66       3.68       -3.73       0.35         4,095.00       0.71       73.34       4,004.69       15.78       4.51       -4.56       0.46         4,099.00       0.28       106.37       4,098.68       15.89       5.	2,968.00	0.64	39.06		11.57	-3.00	2.96	0.59
3,250.00       0.69       327.59       3,249.74       14.57       -2.83       2.78       0.37         3,345.00       0.28       0.62       3,344.74       15.29       -3.14       3.08       0.51         3,439.00       1.07       96.69       3,438.73       15.42       -2.26       2.21       1.21         3,533.00       0.75       92.58       3,532.72       15.29       -0.78       0.72       0.35         3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,722.00       1.14       77.18       3,721.70       15.53       1.43       -1.49       0.77         3,816.00       0.65       91.37       3,815.69       15.72       2.88       -2.93       0.57         3,910.00       0.33       100.09       3,909.69       15.66       3.68       -3.73       0.35         4,005.00       0.71       73.34       4,004.69       15.78       4.51       -4.56       0.46         4,099.00       0.28       106.37       4,098.68       15.89       5.29       -5.34       0.53         4,193.00       0.65       126.04       4,192.68       15.51       5.	3,062.00	0.50	27.58	3,061.75	12.34	-2.48	2.44	0.19
3,345.00         0.28         0.62         3,344.74         15.29         -3.14         3.08         0.51           3,439.00         1.07         96.69         3,438.73         15.42         -2.26         2.21         1.21           3,533.00         0.75         92.58         3,532.72         15.29         -0.78         0.72         0.35           3,627.00         0.41         84.81         3,626.71         15.29         0.17         -0.23         0.37           3,722.00         1.14         77.18         3,721.70         15.53         1.43         -1.49         0.77           3,816.00         0.65         91.37         3,815.69         15.72         2.88         -2.93         0.57           3,910.00         0.33         100.09         3,909.69         15.66         3.68         -3.73         0.35           4,005.00         0.71         73.34         4,004.69         15.78         4.51         -4.56         0.46           4,099.00         0.28         106.37         4,098.68         15.89         5.29         -5.34         0.53           4,193.00         0.65         126.04         4,192.68         15.51         5.94         -5.99         0.	3,156.00	0.86	350.27	3,155.75	13.40	-2.41	2.36	0.59
3,345.00       0.28       0.62       3,344.74       15.29       -3.14       3.08       0.51         3,439.00       1.07       96.69       3,438.73       15.42       -2.26       2.21       1.21         3,533.00       0.75       92.58       3,532.72       15.29       -0.78       0.72       0.35         3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,722.00       1.14       77.18       3,721.70       15.53       1.43       -1.49       0.77         3,816.00       0.65       91.37       3,815.69       15.72       2.88       -2.93       0.57         3,910.00       0.33       100.09       3,909.69       15.66       3.68       -3.73       0.35         4,005.00       0.71       73.34       4,004.69       15.78       4.51       -4.56       0.46         4,099.00       0.28       106.37       4,098.68       15.89       5.29       -5.34       0.53         4,193.00       0.65       126.04       4,192.68       15.51       5.94       -5.99       0.42         4,287.00       1.12       60.53       4,286.67       15.65       7.1	3,250.00	0.69	327.59	3,249.74	14.57	-2.83	2.78	0.37
3,439.00       1.07       96.69       3,438.73       15.42       -2.26       2.21       1.21         3,533.00       0.75       92.58       3,532.72       15.29       -0.78       0.72       0.35         3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,722.00       1.14       77.18       3,721.70       15.53       1.43       -1.49       0.77         3,816.00       0.65       91.37       3,815.69       15.72       2.88       -2.93       0.57         3,910.00       0.33       100.09       3,909.69       15.66       3.68       -3.73       0.35         4,005.00       0.71       73.34       4,004.69       15.78       4.51       -4.56       0.46         4,099.00       0.28       106.37       4,098.68       15.89       5.29       -5.34       0.53         4,193.00       0.65       126.04       4,192.68       15.51       5.94       -5.99       0.42         4,287.00       1.12       60.53       4,286.67       15.65       7.17       -7.23       1.10	3,345.00	0.28	0.62					
3,533.00       0.75       92.58       3,532.72       15.29       -0.78       0.72       0.35         3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,722.00       1.14       77.18       3,721.70       15.53       1.43       -1.49       0.77         3,816.00       0.65       91.37       3,815.69       15.72       2.88       -2.93       0.57         3,910.00       0.33       100.09       3,909.69       15.66       3.68       -3.73       0.35         4,005.00       0.71       73.34       4,004.69       15.78       4.51       -4.56       0.46         4,099.00       0.28       106.37       4,098.68       15.89       5.29       -5.34       0.53         4,193.00       0.65       126.04       4,192.68       15.51       5.94       -5.99       0.42         4,287.00       1.12       60.53       4,286.67       15.65       7.17       -7.23       1.10				3,438.73				
3,627.00       0.41       84.81       3,626.71       15.29       0.17       -0.23       0.37         3,722.00       1.14       77.18       3,721.70       15.53       1.43       -1.49       0.77         3,816.00       0.65       91.37       3,815.69       15.72       2.88       -2.93       0.57         3,910.00       0.33       100.09       3,909.69       15.66       3.68       -3.73       0.35         4,005.00       0.71       73.34       4,004.69       15.78       4.51       -4.56       0.46         4,099.00       0.28       106.37       4,098.68       15.89       5.29       -5.34       0.53         4,193.00       0.65       126.04       4,192.68       15.51       5.94       -5.99       0.42         4,287.00       1.12       60.53       4,286.67       15.65       7.17       -7.23       1.10								
3,816.00     0.65     91.37     3,815.69     15.72     2.88     -2.93     0.57       3,910.00     0.33     100.09     3,909.69     15.66     3.68     -3.73     0.35       4,005.00     0.71     73.34     4,004.69     15.78     4.51     -4.56     0.46       4,099.00     0.28     106.37     4,098.68     15.89     5.29     -5.34     0.53       4,193.00     0.65     126.04     4,192.68     15.51     5.94     -5.99     0.42       4,287.00     1.12     60.53     4,286.67     15.65     7.17     -7.23     1.10	3,627.00	0.41	84.81					
3,816.00     0.65     91.37     3,815.69     15.72     2.88     -2.93     0.57       3,910.00     0.33     100.09     3,909.69     15.66     3.68     -3.73     0.35       4,005.00     0.71     73.34     4,004.69     15.78     4.51     -4.56     0.46       4,099.00     0.28     106.37     4,098.68     15.89     5.29     -5.34     0.53       4,193.00     0.65     126.04     4,192.68     15.51     5.94     -5.99     0.42       4,287.00     1.12     60.53     4,286.67     15.65     7.17     -7.23     1.10	3,722.00	1.14	77.18	3,721.70	15.53	1.43	-1.49	0.77
3,910.00     0.33     100.09     3,909.69     15.66     3.68     -3.73     0.35       4,005.00     0.71     73.34     4,004.69     15.78     4.51     -4.56     0.46       4,099.00     0.28     106.37     4,098.68     15.89     5.29     -5.34     0.53       4,193.00     0.65     126.04     4,192.68     15.51     5.94     -5.99     0.42       4,287.00     1.12     60.53     4,286.67     15.65     7.17     -7.23     1.10	3,816.00							
4,005.00       0.71       73.34       4,004.69       15.78       4.51       -4.56       0.46         4,099.00       0.28       106.37       4,098.68       15.89       5.29       -5.34       0.53         4,193.00       0.65       126.04       4,192.68       15.51       5.94       -5.99       0.42         4,287.00       1.12       60.53       4,286.67       15.65       7.17       -7.23       1.10			100.09					
4,099.00     0.28     106.37     4,098.68     15.89     5.29     -5.34     0.53       4,193.00     0.65     126.04     4,192.68     15.51     5.94     -5.99     0.42       4,287.00     1.12     60.53     4,286.67     15.65     7.17     -7.23     1.10				4,004.69				
4,287.00       1.12       60.53       4,286.67       15.65       7.17       -7.23       1.10								
4,287.00       1.12       60.53       4,286.67       15.65       7.17       -7.23       1.10	4,193.00	0.65	126.04	4,192.68	15.51	5.94	-5.99	0.42
	4,287.00			4,286.67				
	4,382.00	1.08	11.31	4,381.65	16.98	8.16	-8.21	0.97

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
4,476.00	1.09	336.82	4,475.64	18.67	7.98	-8.04	0.68
4,570.00	0.92	336.09	4,569.62	20.18	7.32	-7.39	0.18
4,664.00	0.48	355.72	4,663.62	21.27	6.98	-7.06	0.53
4,759.00	0.87	349.92	4,758.61	22.37	6.83	-6.90	0.42
4,853.00	1.08	349.43	4,852.60	23.95	6.54	-6.62	0.22
4,947.00	1.42	3.06	4,946.57	25.98	6.44	-6.53	0.48
5,041.00	3.11	342.50	5,040.50	29.58	5.74	-5.84	1.97
5,136.00	4.76	359.73	5,135.27	35.98	4.94	-5.07	2.12
5,230.00	3.93	355.82	5,229.00	43.09	4.69	-4.84	0.94
<b>Tie-On for L</b> 5,280.00	.ateral 3.20	352.72	5,278.91	46.18	4.39	-4.54	1.51
First Sperry	MWD Survey	(Lateral) @ 52	280.00 ft				
5,285.00	3.09	348.13	5,283.90	46.45	4.34	-4.50	5.49
Kick-Off poi 5,311.00	int 2.90	320.80	5,309.86	47.GE	0.70	0.04	<b>5</b> 40
5,342.00	4.62	282.40	•	47.65	3.78	-3.94	5.49
5,342.00 5,374.00	7.78	262.40 264.42	5,340.80 5,370.64	48.52	2.07	-2.23	9.54
5,374.00 5,405.00	7.76 11.56	254.42 253.30	5,372.61	48.59	-1.35	1.18	11.48
5,437.00	14.86	253.30 254.12	5,403.17	47.49	-6.41	6.25	13.55
5,468.00	17.45	257.18	5,434.32 5,464.09	45.45	-13.43	13.28	10.33
•			•	43.33	-21.79	21.64	8.79
5,500.00	20.95	259.27	5,494.31	41.20	-32.09	31.95	11.14
5,531.00	24.75	260.46	5,522.87	39.09	-43.94	43.81	12.35
5,563.00	28.77	262.87	5,551.44	37.02	-58.20	58.07	13.01
5,594.00	31.71	264.64	5,578.22	35.34	-73.71	73.59	9.91
5,625.00 5,657.00	34.12 36.37	265.77 268.76	5,604.24 5,630.37	33.93 33.07	-90.50	90.38	8.02
5,688.00	39.69	270.25	5,654.79	32.91	-108.94 -128.03	108.83	8.86
5,720.00	43.81	270.25	5,678.66	33.04		127.92	11.11
5,751.00	46.83	269.85	5,700.45	33.10	-149.33 -171.37	149.22 171.26	12.88 9.84
5,782.00	50.76	268.30	5,720.87	32.71	-194.69	194.58	13.22
5,814.00	54.81	267.30	5,740.22	31.73	-220.15	220.04	12.90
5,845.00	57.97	267.22	5,757.38	30.50	-245.93	245.83	10.20
5,877.00	60.35	267.96	5,773.78	29.34	-273.38	273.28	7.70
5,908.00	62.48	268.96	5,788.61	28.61	-300.59	300.49	7.43
5,940.00	65.39	270.28	5,802.67	28.43	-329.33	329.23	9.82
5,971.00	68.10	271.82	5,814.91	28.95	-357.80	357.70	9.86
6,002.00	72.42	272.52	5,825.38	30.06	-386.95	386.85	14.10
6,034.00	76.75	272.74	5,833.88	31.48	-417.76	417.65	13.55
6,065.00	81.71	272.20	5,839.68	32.79	-448.18	448.07	16.09
6,097.00	83.23	272.53	5,843.87	34.10	-479.88	479.76	4.86
6,141.00	85.36	272.56	5,848.24	36.04	-523.61	523.49	4.84
6,235.00	92.63	274.49	5,849.89	41.82	-617.35	617.21	8.00
6,282.00	91.25	274.07	5,848.30	45.32	-664.19	664.04	3.07
6,329.00	91.52	272.25	5,847.16	47.91	-711.11	710.94	3.91
6,376.00	92.79	271.16	5,845.40	49.31	-758.05	757.88	3.56
6,425.00	93.29	270.00	5,842.80	49.80	-806.98	806.80	2.57
6,472.00	92.79	269.18	5,840.30	49.47	-853.91	853.74	2.04
6,520.00	92.66	269.22	5,838.02	48.80	-901.85	901.68	0.28
6,567.00	92.83	269.30	5,835.77	48.19	-948.79	948.62	0.40
6,615.00	91.55	268.41	5,833.94	47.23	-996.75	996.58	3.25
6,662.00	91.04	267.94	5,832.87	45.74	-1,043.71	1,043.55	1.48

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
6,710.00	90.54	267.62	5,832,21	43.88	-1,091.67	1,091.51	1.24
6,757.00	91.32	269.71	5,831.45	42.78	-1,138.65	1,138.50	4.75
6,805.00	91.88	270.54	5,830.11	42.89	-1,186.63	1,186.48	2.09
6,852.00	93.53	271.02	5,827.89	43.53	-1,233.57	1,233.42	3.66
6,900.00	94.18	271.48	5,824.66	44.57	-1,281.45	1,281.29	1.66
6,947.00	93.95	271.38	5,821.33	45.74	-1,328.32	1,328.15	0.53
6,996.00	92.73	270.24	5,818.48	46.43	-1,377.23	1,377.06	3.40
7,043.00	91.58	270.14	5,816.71	46.59	-1,424.19	1,424.03	2.46
7,091.00	92.62	270.68	5,814.95	46.93	-1,472.16	1,471.99	2.44
7,138.00	91.92	270.66	5,813.09	47.48	-1,519.12	1,518.95	1.49
7,187.00	91.32	270.01	5,811.70	47.77	-1,568.10	1,567.93	1.80
7,234.00	90.44	269.98	5,810.98	47.76	-1,615.09	1,614.92	1.87
7,282.00	90.74	268.90	5,810.49	47.29	-1,663.09	1,662.92	2.34
7,329.00	90.40	269.05	5,810.02	46.45	-1,710.08	1,709.91	0.79
7,377.00	89.70	268.92	5,809.98	45.60	-1,758.07	1,757.90	1.48
7,424.00 7,472.00	90.30 90.13	269.33	5,809.98	44.89	-1,805.06	1,804.90	1.55
7, <del>4</del> 72.00 7,519.00	91.88	269.64 270.46	5,809.80	44.45	-1,853.06	1,852.90	0.74
7,568.00	92.26	269.99	5,808.97 5,807.20	<b>44.50</b> <b>44.69</b>	-1,900.05 -1,949.02	1,899.89 1,948.85	4.11 1.23
7,615,00	92.39	268.52	5,805.30	44.08	-1,995.97	1,995.81	3.14
7,663.00	92.69	267.93	5,803.17	42.59	-2,043.90	2,043.75	1.38
7,710.00	91.45	267.23	5,801.47	40.61	-2,090.83	2,090.68	3.03
7,758.00	89.49	266.84	5,801.08	38.13	-2,138.76	2,138.62	4.16
7,805.00	89.29	267.46	5,801.58	35.79	-2,185.70	2,185.57	1.39
7,854.00	90.27	268.36	5,801.77	34.00	-2,234.67	2,234.54	2.72
7,901.00	91.01	268.90	5,801.24	32.88	-2,281.65	2,281.52	1.95
7,949.00	91.11	269.23	5,800.36	32.10	-2,329.63	2,329.51	0.72
7,996.00	92.63	270.12	5,798.82	31.83	-2,376.61	2,376.48	3.75
8,044.00	93.33	270.06	5,796.33	31.90	-2,424.54	2,424.42	1.46
8,091.00	94.38	270.00	5,793.17	31.93	-2,471.43	2, <del>4</del> 71.31	2.24
8,140.00	92.26	267.21	5,790.33	30.74	-2,520.33	2,520.21	7.14
8,187.00	91.11	267.50	5,788.95	28.57	-2,567.26	2,567.15	2.52
8,235.00	92.15	268.11	5,787.58	26.73	-2,615.20	2,615.10	2.51
8,282.00	91.01	268.14	5,786.28	25.19	-2,662.16	2,662.06	2.43
8,331.00	91.51	268.28	5,785.21	23.66	-2,711.12	2,711.03	1.06
8,378.00	91.65	268.58	5,783.91	22.38	-2,758.09	2,758.00	0.70
8,426.00	91.58	268.34	5,782.56	21.09	-2,806.05	2,805.96	0.52
8,473.00 8,521.00	90.30 89.76	268.15 267.97	5,781.79 5,781.76	19.65 18.02	-2,853.02 -2,900.99	2,852.94 2,900.92	2.75 1.19
8,568.00	89.76	268.58	5,781.96	16.61	-2,947.97	2,947.90	1.30
8,615.00	90.67	267.98	5,781.78	15.20	-2,994.95	2,994.88	2.32
8,662.00	91.38	268.33	5,780.94	13.68	-3,041.92	3,041.85	1.68
8,710.00	91.18	268.62	5,779.87	12.41	-3,089.89	3,089.83	0.73
8,757.00	90.67	268.12	5,779.11	11.07	-3,136.86	3,136.81	1.52
8,805.00	92.66	269.23	5,777.72	9.96	-3,184.83	3,184.78	4.75
8,852.00	93.50	269.36	5,775.19	9.38	-3,231.76	3,231.70	1.81
8,900.00	93.56	269.56	5,772.24	8.93	-3,279.66	3,279.61	0.43
8,947.00	93.49	269.56	5,769.35	8.57	-3,326.57	3,326.52	0.15
8,995.00	93.09	269.62	5,766.59	8.23	-3,374.49	3,374.44	0.84
9,042.00	92.90	269.53	5,764.14	7.88	-3,421.43	3,421.38	0.45
9,090.00	91.51	268.62	5,762.29	7.11	-3,469.38	3,469.34	3.46

### Survey Report for LC Tribal #12H-28-46 - Sperry MWD Surveys (Lateral)

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
9,137.00	92.05	268.76	5,760.83	6.03	-3,516.35	3,516.31	1.19
9,186.00	90.84	268.80	5,759.59	4.99	-3,565.32	3,565.28	2.47
9,233.00	90.54	269.03	5,759.03	4.10	-3,612.31	3,612.27	0.80
9,281.00	91.14	269.23	5,758.32	3.37	-3,660.30	3,660.26	1.32
9,328.00	89.56	269.08	5,758.04	2.68	-3,707.29	3,707.26	3.38
9,376.00	89.19	268.93	5,758.56	1.84	-3,755.28	3,755.25	0.83
9,423.00	89.36	268.41	5,759.15	0.75	-3,802.26	3,802.24	1.16
9,471.00	89.66	268.90	5,759.57	-0.37	-3,850.25	3,850.23	1.20
9,518.00	89.76	268.88	5,759.80	-1.28	-3,897.24	3,897.22	0.22
9,526.00	89.83	269.01	5,759.83	-1.43	-3,905.24	3,905.22	1.85
Final Sperry	MWD Survey	(Lateral) @ 95	26.00 ft				
9,574.00	89.83	269.01	5,759.97	-2.26	-3,953.23	3,953.21	0.00
Straight Lin	e Projection t	o TD (Lateral)	@ 9574 00 ft				

#### Survey Annotations

Measured	Vertical	Local Coor	rdinates	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
0.00	0.00	0.00	0.00	Tie-On
137.00	136.99	-0.06	-1.13	First Sperry MWD Survey(Pilot Hole) @ 137.00 ft
5,230.00	5,229.00	43.09	4.69	Tie-On for Lateral
5,280.00	5,278.91	46.18	4.39	First Sperry MWD Survey (Lateral) @ 5280.00 ft
5,285.00	5,283.90	46.45	4.34	Kick-Off point
9,526.00	5,759.83			Final Sperry MWD Survey(Lateral) @ 9526,00 ft
9.574.00	5,759.97	1.49	-3.82	Straight Line Projection to TD (Lateral) @ 9574.00 ft

#### Vertical Section Information

Angle			Origin	Orig	gin	Start
Туре	Target	Azimuth (°)	Туре	+N/_S (ft)	+E/-W (ft)	TVD (ft)
Target	LC Tribal #12H-28-46 Plan A-2 Lateral BHL TGT	269.81	Slot	0.00	0.00	0.00

#### Survey tool program

From	То	Survey/Plan	Survey Tool
(ft)	(ft)		
137.00	9,574.00	Sperry MWD Surveys (Lateral)	MWD

<u>Targets</u>									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
LC Tribal #12H-28-4 - survey hits targ - Point	0.00 et center	-0.63	0.00	0.00	0.00	645,570.26	2,263,231.45	40° 6' 7.070357 N	O° 33' 32.241600 W
LC Tribal #12H-28-4 - survey hits targ - Polygon	0.00 et center	-0.63	0.00	0.00	0.00	645,570.26	2,263,231.45	40° 6' 7.070357 N	J° 33' 32.241600 W
LC Tribal #12H-28-4 - survey misses t - Point	0.00 arget cen	0.00 Iter by 13	5,765.00 32.34ft at 957	-13.87 4.00ft MD (57	-4,084.96 '59.97 TVD,	•	2,259,147.23 3.23 E)	40° 6' 6.929957 N	O° 34' 24.808800 W

## North Reference Sheet for Sec. 28-T4S-R6W - LC Tribal #12H-28-46 - Plan A Rev 2 (Lateral)

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to RKB 24' @ 7277.00ft (H&P 319). Northing and Easting are relative to LC Tribal #12H-28-46

Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866 Projection method is Lambert Conformal Conic (2 parallel)

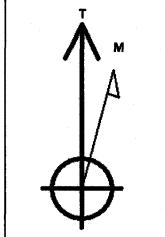
Central Meridian is 111° 30' 0.000000 W°, Longitude Origin:0° 0' 0.000000 E°, Latitude Origin:40° 38' 60.000000 N°

False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 0,99990965

Grid Coordinates of Well: 645,570.26 ft N, 2,263,231.45 ft E Geographical Coordinates of Well: 40° 06′ 07.07" N, 110° 33′ 32.24" W Grid Convergence at Surface is: 0.60°

Based upon Minimum Curvature type calculations, at a Measured Depth of 9,574.00ft the Bottom Hole Displacement is 3,953.23ft in the Direction of 269.97° (True).

Magnetic Convergence at surface is: -10.94° (22 July 2011, , BGGM2011)



Magnetic Model: BGGM 2011

Date: 22-Jul-11
Declination: 11.55°
Inclination/Dip: 65.73°
Field Strength: 52164

Grid North is 0.60° E ast of True North (Grid Convergence)
Magnetic North is 11.55° E ast of True North (Magnetic Declination)
Magnetic North is 10.94° E ast of Grid North (Magnetic Convergence)

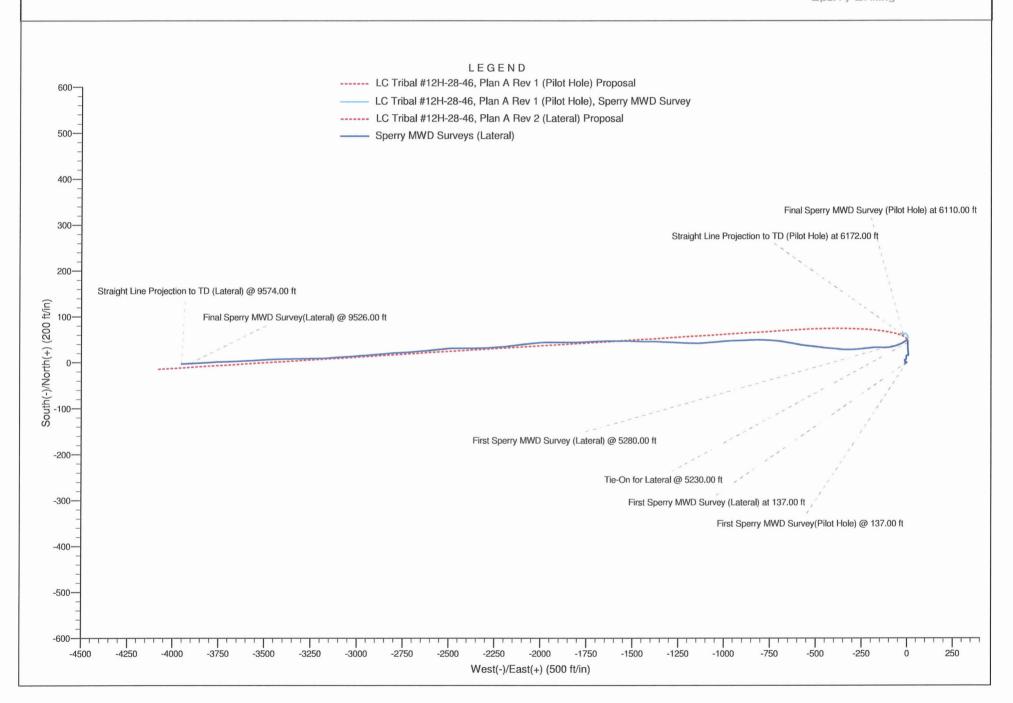
To convert a True Direction to a Grid Direction, Subtract 0.60°
To convert a Magnetic Direction to a True Direction, Add 11.55° E ast
To convert a Magnetic Direction to a Grid Direction, Add 10.94°

Project: Duchesne County, UT (NAD 1927)

Site: Sec. 28-T4S-R6W Well: LC Tribal #12H-28-46

### Bill Barrett Corp



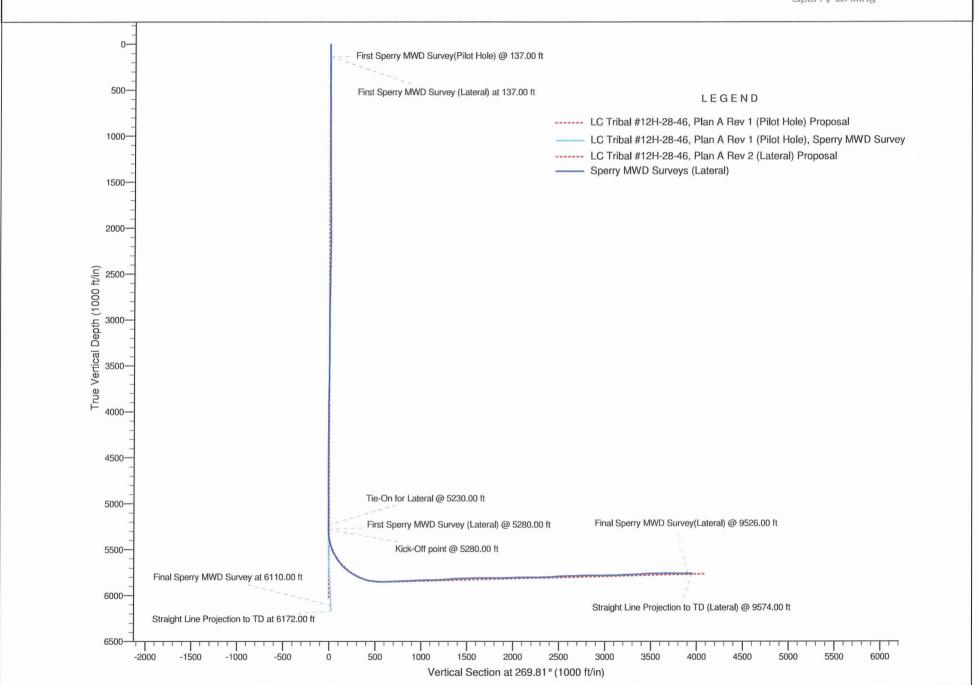


Project: Duchesne County, UT (NAD 1927)

Site: Sec. 28-T4S-R6W Well: LC Tribal #12H-28-46

### Bill Barrett Corp





Division of Oil, Gas and Mining

Operator Change/Name Change Worksheet-for State use only

Effective Date:

11/1/2016

FORMER OPERATOR:	NEW OPERATOR:
Bill Barrett Corporation	Rig II, LLC
1099 18th Street, Suite 2300	1582 West 2600 South
Denver, CO 80202	Woods Cross, UT 84087
CA Number(s):	Unit(s):

#### WELL INFORMATION:

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
See Attached List									

#### **OPERATOR CHANGES DOCUMENTATION:**

1. Sundry or legal documentation was received from the **FORMER** operator on:

10/21/2016

2. Sundry or legal documentation was received from the NEW operator on:

10/21/2016

3. New operator Division of Corporations Business Number:

8256968-0160

#### **REVIEW:**

1. Surface Agreement Sundry from NEW operator on Fee Surface wells received on:

N/A

2. Receipt of Acceptance of Drilling Procedures for APD on:

10/21/2016

3. Reports current for Production/Disposition & Sundries:

11/2/2016

4. OPS/SI/TA well(s) reviewed for full cost bonding:

11/3/2016

5. UIC5 on all disposal/injection/storage well(s) approved on:

11/3/2016

6. Surface Facility(s) included in operator change:

None

7. Inspections of PA state/fee well sites complete on (only upon operators request):

11/3/2016

#### **NEW OPERATOR BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number:

UTB000712

2. Indian well(s) covered by Bond Number:

LPM 922467

3.State/fee well(s) covered by Bond Number(s):

9219529

#### **DATA ENTRY:**

1. Well(s) update in the OGIS on:

11/7/2016

2. Entity Number(s) updated in OGIS on:

11/7/2016

3. Unit(s) operator number update in OGIS on:

N/A

4. Surface Facilities update in OGIS on:

N/A

5. State/Fee well(s) attached to bond(s) in RBDMS on:

11/7/2016

6. Surface Facilities update in RBDMS on:

N/A

#### **COMMENTS:**

Well Name	Sec	TWN	RNG	API Number	Entity	Mineral	Surface	Туре	Status
SWD 9-36 BTR	9	030S	060W	4301350646	18077	Indian	Fee	WD	Α
16-6D-46 BTR SWD	6	040S	060W	4301350781	18327	Indian	Fee	WD	Α
6-32-36 BTR SWD	32	030S	060W	4301350921	18329	Indian	Fee	WD	Α
LC TRIBAL 8-26D-47	26	040S	070W	4301334024		Indian	Indian	OW	APD
16-21D-37 BTR	21	030S	070W	4301350758		Indian	Fee	OW	APD
14-11D-37 BTR	11	030S	070W	4301350862		Indian	Fee	OW	APD
7-17D-46 BTR	17	040\$	060W	4301350883		Indian	Indian	OW	APD
14-12D-37 BTR	12	030S	070W	4301350894		Indian	Fee	OW	APD
1-18D-36 BTR	18	030S	060W	4301350922		Indian	Fee	OW	APD
13-2D-45 BTR	2	040S	050W	4301350931		Indian	Indian	OW	APD
5H-16-46 BTR	16	040S	060W	4301350992		Indian	Indian	OW	APD
9H-17-45 BTR	17	040S	050W	4301351098		Indian	Indian	OW	APD
13H-8-46 BTR UB	8	040S	060W	4301351124		Indian	Indian	OW	APD
BH-9-46 BTR	9	040S	060W	4301351140		Indian	Indian	ow	APD
_C TRIBAL 7-31D-37	31	030S	070W	4301351147		Indian	Fee	ow	APD
14-16D-45 BTR	16	040S	050W	4301351178		Indian	Indian	ow	APD
16-19D-37 BTR	19	030S	070W	4301351179		Indian	Fee	OW	APD
6-2D-45 BTR	2	040S	050W	4301351234		Indian	Indian	ow	APD
2-2D-45 BTR	2	040S	050W	4301351235		Indian	Indian	ow	APD
10-26-35 BTR	26	030S	050W	4301351248		Indian	Fee	OW	APD
C TRIBAL 1H-33-46	33	040S	060W	4301351257		Indian	Fee	ow	APD
_C TRIBAL 9-25D-46	25	040S	060W	4301351276		Indian	Indian	ow	APD
C TRIBAL 8H-30-45	30	040S	050W	4301351277	(8.7)	Indian	Indian	OW	APD
_C TRIBAL 16H-30-45	30	040S	050W	4301351279		Indian	Indian	OW	APD
_C TRIBAL 13-30D-45	30	040S	050W	4301351282		Indian	Indian	ow	APD
_C TRIBAL 16H-36-46	36	040S	060W	4301351291		Indian	Indian	OW	APD
C TRIBAL 13H-30-46	30	040S	060W	4301351321		Indian	Indian	OW	APD
C TRIBAL 13H-31-46	31	040S	060W	4301351326		Indian	Indian	OW	APD
_C TRIBAL 16-31D-46	31	040S	060W	4301351328		Indian	Indian	OW	APD
C TRIBAL 5H-26-47	26	040S	070W	4301351337		Indian	Indian	OW	APD
_C TRIBAL 5H-19-45	20	040S	050W	4301351349		Indian	Indian	OW	APD
C TRIBAL 16-36D-47	36	040S	070W	4301351363		Indian	Indian	OW	APD
15-4D-47 BTR	4	040S	070W	4301351377		Indian	Fee	OW	APD
16-23D-46 LC TRIBAL	23	040S	060W	4301351396		Indian	Fee	ow	APD
15-2D-36 BTR	2	030S	060W	4301351419		Indian	Fee	OW	APD
16-23D-37 BTR	23	030S	070W	4301351420	1	Indian	Fee	ow	APD
11-9D-47 BTR	9	040S	070W	4301351422		Indian	Fee	OW	APD
15-13D-47 BTR	13	040S	070W	4301351424		Indian	Indian	OW	APD
_C TRIBAL 15-19D-46	19	040S	060W	4301351426		Indian	Indian	OW	APD
16-13D-45 BTR	13	040S	050W	4301351428		Indian	Indian	OW	APD

14-12D-45 BTR	12	040S	050W	4301351444	Indian	Indian	OW	APD
16-14D-45 BTR	14	040S	050W	4301351445	Indian	Indian	OW	APD
5-13D-45 BTR	13	040S	050W	4301351446	Indian	Indian	OW	APD
LC TRIBAL 16-26D-46	26	040S	060W	4301351450	Indian	State	OW	APD
LC TRIBAL 10-20D-40	34	0408	060W	4301351451				
16-12D-45 BTR	12	040S	050W	4301351451	Indian Indian	State Indian	OW	APD
8-12D-45 BTR	12	040S	050W	4301351452			OW	APD
LC TRIBAL 1-35D-46	35	040S	060W		Indian	Indian	OW	APD
16-25D-37 BTR	<del></del>	0405	070W	4301351454	Indian	Fee	OW	APD
LC TRIBAL 13H-29-46	25			4301351455	Indian	Fee	OW	APD
	28	0408	060W	4301351462	Indian	Fee	OW	APD
LC TRIBAL 14-30D-37	30	0308	070W	4301351494	Indian	Fee	OW	APD
7-13D-45 BTR	13	0408	050W	4301351497	Indian	Indian	OW	APD
LC TRIBAL 4H-35-46	35	0408	060W	4301351515	Indian	Fee	OW	APD
LC TRIBAL 13H-19-46	19	040\$	060W	4301351543	Indian	Indian	OW	APD
16-26D-37 BTR	26	030S	070W	4301351598	Indian	Fee	OW	APD
LC TRIBAL 16-31D-37	31	030\$	070W	4301351610	Indian	Fee	OW	APD
5-4-35 BTR	4	030S	050W	4301351613	Indian	Fee	OW	APD
LC TRIBAL 16-31D-47	31	040S	070W	4301351616	Indian	Indian	OW	APD
LC TRIBAL 13H-31-47	31	040S	070W	4301351617	Indian	Indian	OW	APD
LC TRIBAL 13-32D-47	32	040S	070W	4301351619	Indian	Indian	OW	APD
LC TRIBAL 16H-32-47	32	040S	070W	4301351620	Indian	Indian	OW	APD
LC TRIBAL 1-32D-47	32	040S	070W	4301351624	Indian	Indian	OW	APD
LC TRIBAL 4H-32-47	32	040S	070W	4301351625	Indian	Indian	OW	APD
LC TRIBAL 13-28D-47	28	040S	070W	4301351627	Indian	Indian	OW	APD
LC TRIBAL 13H-29-47	28	040S	070W	4301351628	Indian	Indian	OW	APD
LC TRIBAL 16H-28-47	28	040S	070W	4301351629	Indian	Indian	OW	APD
LC TRIBAL 1-28D-47	28	040S	070W	4301351639	Indian	Indian	OW	APD
LC TRIBAL 1H-27-47	28	040S	070W	4301351640	Indian	Indian	OW	APD
LC TRIBAL 4H-28-47	28	040S	070W	4301351641	Indian	Indian	OW	APD
LC TRIBAL 7-25D-58	25	050S	W080	4301351643	Indian	Indian	OW	APD
LC TRIBAL 6-25D-58	25	050S	080W	4301351644	Indian	Indian	OW	APD
LC TRIBAL 13H-24-58	24	050S	W080	4301351645	Indian	Indian	OW	APD
LC TRIBAL 16-24D-58	24	050S	080W	4301351646	Indian	Indian	OW	APD
LC Tribal 8-23D-46	23	040S	060W	4301351654	Indian	Fee	OW	APD
LC Tribal 16-35D-45	35	040S	050W	4301351656	Indian	Fee	OW	APD
LC Tribal 13H-35-45	35	040S	050W	4301351657	Indian	Fee	ow	APD
LC Tribal 16-36D-45	36	040S	050W	4301351658	Indian	Fee	ow	APD
LC Tribal 13H-36-45	36	040S	050W	4301351659	Indian	Fee	OW	APD
LC Tribal 5-36D-45	36	040S	050W	4301351661	Indian	Fee	OW	APD
LC Tribal 8-26D-46	26	040\$	060W	4301351663	Indian	Fee	OW	APD
3-29D-36 BTR	29	0308	060W	4301351665	Indian	Fee	OW	APD

LC Tribal 5-35D-45	35	040S	050W	4301351666	Indian	Fee	OW	APD
_C Tribal 5-24D-46	24	0408	060W	4301351668	Indian	Indian	ow	APD
_C TRIBAL 6-12D-58	12	0508	080W	4301351696	Indian	Indian	OW	APD
LC TRIBAL 8-12D-58	12	050S	080W	4301351697	Indian	Indian	OW	APD
.C TRIBAL 16H-22-47	21	040S	070W	4301351700	Indian	Indian	OW	APD
5-25D-37 BTR	25	030S	070W	4301351803	Indian	Fee	OW	APD
8-3D-36 BTR	3	0308	060W	4301351804	Indian	Fee	OW	APD
14-26D-37 BTR	26	0308	070W	4301351805	Indian	Fee	OW	APD
9-4-35 BTR	4	0308	050W	4301351806	Indian	Fee	ow	APD
11-4D-35 BTR	4	030S	050W	4301351807	Indian	Fee	OW	APD
16-27D-37 BTR	27	0308	070W	4301351808	Indian	Fee	OW	APD
14-27D-37 BTR	27	0308	070W	4301351809	Indian	Fee	OW	APD
14-16D-46 BTR	16	040S	060W	4301351812	Indian	Indian	OW	APD
_C Tribal 16-35D-48	35	040S	080W	4301351847	Indian	Indian	OW	APD
LC Tribal 13H-35-48	35	040S	080W	4301351848	Indian	Indian	OW	APD
_C Tribal 13-2D-58	11	050S	080W	4301351850	Indian	Indian	OW	APD
5-13D-36 BTR	13	0308	060W	4301351862	Indian	Fee	OW	APD
5-8D-36 BTR	8	0308	060W	4301351871	Indian	Fee	OW	APD
16-1D-36 BTR	1	0308	060W	4301351872	Indian	Fee	ow	APD
3-18D-46 BTR	18	040S	060W	4301351897	Indian	Fee	OW	APD
_C Tribal 5-36D-46	36	0408	060W	4301351905	Indian	Indian	OW	APD
LC Tribal 5-26D-45	26	040S	050W	4301351907	Indian	Indian	OW	APD
14-13D-45 BTR	13	040S	050W	4301351974	Indian	Indian	OW	APD
14-34D-46 DLB	34	040S	060W	4301351975	Indian	Fee	OW	APD
LC Tribal 5-21D-45	21	0408	050W	4301352001	Indian	Indian	OW	APD
_C Tribal 8-22D-45	22	0408	050W	4301352002	Indian	Indian	OW	APD
_C Tribal 8-25D-45	25	0408	050W	4301352007	Indian	Indian	OW	APD
LC Tribal 16-25D-45	25	040S	050W	4301352008	Indian	Indian	OW	APD
LC Tribal 16-22D-45	22	040S	050W	4301352009	Indian	Indian	OW	APD
LC Tribal 16-26D-45	26	040S	050W	4301352010	Indian	Indian	OW	APD
LC Tribal 14-31D-37	31	0308	070W	4301352016	Indian	Fee	OW	APD
5-12D-45 BTR	12	040S	050W	4301352030	Indian	Indian	ow	APD
LC Tribal 9-20D-45	20	040S	050W	4301352031	Indian	Indian	OW	APD
LC Tribal 13-35D-47	35	0408	070W	4301352055	Indian	Indian	ow	APD
C Tribal 1-23D-47	23	040S	070W	4301352057	Indian	Indian	ow =	APD
9-17D-46 BTR	17	040S	060W	4301352059	Indian	Indian	OW	APD
11-18D-46 BTR	18	040S	060W	4301352060	Indian	Indian	OW	APD
9-10D-47 BTR	10	0408	070W	4301352092	Indian	Fee	OW	APD
LC Tribal 1-17D-47	17	0408	070W	4301352096	Indian	Fee	OW	APD
7-35D-37 BTR	35	0308	070W	4301352115	Indian	Fee	OW	APD
14-25D-37 BTR	25	0308	070W	4301352116	Indian	Fee	OW	APD

LC Tribal 5-25-46	25	040S	060W	4301352126	Indian	Indian	OW	APD
8-33D-35 BTR	33	030S	050W	4301352161	Indian	Fee	OW	APD
5-4D-36 BTR	4	030S	060W	4301352175	Indian	Fee	OW	APD
'-4D-36 BTR	4	030S	060W	4301352176	Indian	Fee	OW	APD
C Tribal 4-36D-47	36	040S	070W	4301352186	Indian	Indian	OW	APD
.C Tribal 4-22D-46	22	040S	060W	4301352944	Indian	Indian	OW	APD
.C Tribal 16-22D-46	22	040S	060W	4301352945	Indian	Indian	OW	APD
.C Tribal 11-19D-46	19	040S	060W	4301352946	Indian	Indian	OW	APD
.C Tribal 7-20D-45	20	040S	050W	4301352947	Indian	Indian	OW	APD
5-11D-35 BTR	11	030S	050W	4301353056	Indian	Fee	OW	APD
3-11D-35 BTR	11	030S	050W	4301353057	Indian	Fee	OW	APD
3TR 16-36D-37	36	030S	070W	4301353059	Indian	Fee	OW	APD
I-29D-35 BTR	30	030S	050W	4301353060	Indian	Fee	ow	APD
-30D-35 BTR	30	030S	050W	4301353061	Fee	Fee	OW	APD
C TRIBAL 3-23D-46	23	040S	060W	4301353066	Indian	State	ow	APD
C Tribal 14-23D-46	23	040S	060W	4301353067	Indian	State	OW	APD
.C Tribal 13-25D-46	25	040S	060W	4301353068	Indian	Indian	OW	APD
C Tribal 14-26D-46	26	040S	060W	4301353069	Indian	State	OW	APD
C Tribal 5-26D-46	26	040S	060W	4301353070	Indian	State	OW	APD
C Tribal 11-35D-45	35	040S	050W	4301353071	Indian	State	OW	APD
C Tribal 7-35D-45	35	040S	050W	4301353072	Indian	State	OW	APD
C Tribal 3-35D-45	35	040S	050W	4301353075	Indian	State	OW	APD
C Tribal 14-36D-45	36	040S	050W	4301353076	Indian	State	OW	APD
C Tribal 13-36D-45	36	040S	050W	4301353077	Indian	State	OW	APD
C Tribal 10-36D-45	36	040S	050W	4301353078	Indian	State	OW	APD
.C Tribal 8-36D-45	36	040S	050W	4301353079	Indian	State	OW	APD
.C Tribal 6-36D-45	36	040S	050W	4301353080	Indian	State	OW	APD
.C Tribal 1-34D-46	34	040S	060W	4301353081	Indian	State	OW	APD
.C Tribal 9-27D-46	27	040S	060W	4301353082	Indian	State	OW	APD
.C Tribal 13-35D-45	35	040S	050W	4301353083	Indian	State	OW	APD
C Tribal 8-35D-45	35	040S	050W	4301353084	Indian	State	OW	APD
.C Tribal 15-35D-45	35	040S	050W	4301353085	Indian	State	OW	APD
C Tribal 12-25D-45	25	040S	050W	4301353122	Indian	Indian	OW	APD
C Tribal 14-25D-45	25	040S	050W	4301353123	Indian	Indian	OW	APD
C Tribal 10-25D-45	25	040S	050W	4301353124	Indian	Indian	ow	APD
C Tribal 11-26-45	26	040S	050W	4301353125	Indian	Indian	OW	APD
C Tribal 13-26D-45	26	040S	050W	4301353126	Indian	Indian	OW	APD
C Tribal 7-31D-46	31	040S	060W	4301353127	Indian	Indian	OW	APD
.C Tribal 7-19D-45	19	040S	050W	4301353128	Indian	Indian	OW	APD
.C Tribal 5-19D-45	19	040S	050W	4301353130	Indian	Indian	OW	APD
.C Tribal 7-25D-46	25	040S	060W	4301353132	Indian	Indian	OW	APD

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_C Tribal 7-24D-46	24	0408	060W	4301353134		Indian	Indian	OW	APD
.C Tribal 14-31D-46	31	040S	060W	4301353135		Indian	Indian	OW	APD
C Tribal 14-30D-46	30	040S	060W	4301353136		Indian	Indian	OW	APD
13-4-35 BTR SWD	4	030S	050W	4301353293		Fee	Fee	OW	APD
.C FEE 14-26D-47	26	040S	070W	4301353294	1	Fee	Indian	OW	APD
C Fee 5-25D-47	25	040S	070W	4301353295		Fee	Indian	OW	APD
7-35-46 LC SWD	35	040S	060W	4301353296		Fee	Fee	OW	APD
.C Fee 1H-33-47	32	040S	070 <b>W</b>	4301353309		Fee	Indian	ow	APD
_C FEE 14-2D-58	2	050S	W080	4301353312		Fee	Indian	OW	APD
C FEE 13H-21-47	21	040S	070W	4301353313		Fee	Indian	OW	APD
C Fee 16-21D-47	21	040S	070W	4301353326		Fee	Indian	OW	APD
6-7D-46 BTR	7	040S	060W	4301353328		Fee	Indian	OW	APD
C Fee 15-26D-47	26	040S	070W	4301353331		Fee	Indian	OW	APD
.C Fee 4-24D-47	23	040S	070W	4301353332		Fee	Indian	OW	APD
.C Fee 5-34D-47	34	040S	070W	4301353333		Fee	Indian	OW	APD
.C Fee 5-35D-47	35	040S	070W	4301353334	:	Fee	Indian	OW	APD
3-34D-47 LC Fee	34	040S	070W	4301353337		Fee	Indian	OW	APD
4-35D-35 BTR	35	030S	050W	4301352120		Fee	Fee	OW	DRL
-17D-46 BTR	17	040S	060W	4301351078		Indian	Indian	OW	OPS
-34D-35 BTR	34	030S	050W	4301351187		Indian	Fee	OW	OPS
5-10D-45 BTR	10	040S	050W	4301351221		Indian	Indian	OW	OPS
-3D-45 BTR	3	040S	050W	4301351810		Indian	Indian	OW	OPS
-34D-35 BTR	34	030S	050W	4301352117		Fee	Fee	OW	OPS
-35D-35 BTR	35	030S	050W	4301352118		Fee	Fee	OW	OPS
-2D-46 BTR	2	040S	060W	4301353086		Indian	Fee	OW	OPS
'-21-46 DLB	21	040S	060W	4301333567	16526	Indian	Indian	OW	P
.C TRIBAL 1H-27-46	27	040S	060W	4301333568	18175	Indian	Fee	GW	P
'-29-46 DLB	29	040S	060W	4301333584	17603	Indian	Fee	GW	P
C TRIBAL 12H-28-46	28	0408	060W	4301333631	18132	Indian	Indian	GW	P
.C TRIBAL 13H-21-46	21	0408	060W	4301333632	18107	Indian	Indian	GW	 P
2-36-36 BTR	36	030S	060W	4301333638	16336	Indian	Fee	GW	P
i-5-46 BTR	5	0408	060W	4301333639	16542	Indian	Fee	OW	P
5-23-36 BTR	23	0308	060W	4301333642	16675	Indian	Fee	GW	P
4-29-36 BTR	29	030S	060W	4301333643	16725	Indian	Fee	ow	P
4-30-36 BTR	30	0308	060W	4301333644	16701	Indian	Fee	GW	<u>'</u>
'-20-46 DLB	20	040S	060W	4301333657	16584	Indian	Indian	OW	'P
.C TRIBAL 5-21D-46	21	0408	060W	4301333658	18887	Indian	Indian	OW	P
-20-46 DLB	20	0408	060W	4301333659	18750	Indian	Indian	GW	P
.C TRIBAL 13H-20-46	20	0408	060W	4301333678	17979	Indian	Indian	GW	P
14-7-46 BTR	7	0408	060W	4301333806	16890	Indian	Indian	GW	P
	1.	0.00	100011	TOO   OOOOOO	10000	HIMIAII	HIGHAIL	UVV	1 1-1

1-5-45 BTR	5	040S	050W	4301333868	16931	Indian	Indian	OW	Р
5-16-36 BTR	16	030S	060W	4301333970	17195	Indian	Fee	ow	P
5-29-36 BTR	29	030S	060W	4301333972	17557	Indian	Fee	OW	P
4-30-36 BTR	30	030S	060W	4301333973	17249	Indian	Fee	OW	P
7-19-46 DLB	19	040S	060W	4301334004	19018	Indian	Indian	OW	Р
5-25-36 BTR	25	0308	060W	4301334021	17126	Fee	Fee	OW	P
5-4-45 BTR	4	0408	050W	4301334089	17507	Indian	Indian	oW	Р
13-2-46 BTR	2	040S	060W	4301334090	18618	Indian	Indian	ow	Р
2-3-45 BTR	3	040S	050W	4301334099	17932	Indian	Indian	OW	Р
7-6-45 BTR	6	040S	050W	4301334100	17653	Indian	Indian	OW	Р
1-9-45 BTR	9	0408	050W	4301334101	17910	Indian	Indian	OW	Р
8-10-45 BTR	10	040S	050W	4301334102	17530	Indian	Indian	ow	Р
7-17-45 BTR	17	040S	050W	4301334104	17933	Indian	Indian	OW	Р
16-7-45 BTR	7	040S	050W	4301334111	17665	Indian	Indian	OW	Р
15-18-45 BTR	18	040S	050W	4301334112	17832	Indian	Indian	ow	P
6-12-46 BTR	12	0408	060W	4301334114	17964	Indian	Indian	ow	P
5-13-46 BTR	13	040S	060W	4301334115	17833	Indian	Indian	OW	Р
16-26-36 BTR	26	030S	060W	4301334132	18028	Indian	Fee	ow	P
1-23-36 BTR	23	030S	060W	4301334136	17722	Indian	Fee	OW	Р
15-10-36 BTR	10	030S	060W	4301334277	17419	Indian	Fee	ow	Р
14-5-46 BTR	5	040S	060W	4301350307	17624	Fee	Fee	ow	Р
14X-22-46 DLB	22	040S	060W	4301350351	17604	Indian	Indian	ow	Р
16-13-36 BTR	13	030S	060W	4301350372	17853	Indian	Fee	ow	Р
5-33-46 DLB	33	040S	060W	4301350397	17765	Indian	Fee	OW	Р
5-34-46 DLB	34	040S	060W	4301350415	17801	Indian	State	GW	Р
LC FEE 12H-32-46	32	040S	060W	4301350431	18003	Fee	Fee	OW	Р
1-13D-47 BTR	13	040S	070W	4301350445	18205	Indian	Fee	OW	Р
16-8D-45 BTR	8	040S	050W	4301350466	18799	Indian	Indian	OW	Р
7-13D-46 BTR	13	040S	060W	4301350470	18076	Indian	Indian	OW	Р
14-8D-45 BTR	8	040S	050W	4301350567	18207	Indian	Indian	OW	Р
14-5D-45 BTR	5	040S	050W	4301350568	18108	Indian	Indian	OW	Р
16-31D-36 BTR	31	030S	060W	4301350573	18004	Indian	Fee	OW	P
5-7D-46 BTR	7	040S	060W	4301350574	18176	Indian	Indian	OW	Р
LC TRIBAL 13H-33-46	34	040S	060W	4301350575	18223	Indian	State	OW	Р
5-8-45 BTR	8	040S	050W	4301350607	18279	Indian	Indian	OW	Р
16-6D-45 BTR	6	040S	050W	4301350610	18177	Indian	Indian	OW	P
5-18D-45 BTR	18	040S	050W	4301350611	18300	Indian	Indian	OW	Р
7-26-37 BTR	26	030\$	070W	4301350641	18131	Indian	Fee	OW	Р
3-11D-36 BTR	11	030S	060W	4301350642	18299	Indian	Fee	OW	Р
16-1D-46 BTR	1	040S	060W	4301350675	18525	Indian	Indian	ow	Р
14-3-45 BTR	3	040S	050W	4301350676	18363	Indian	Indian	ow	Р

4-17D-45 BTR	17	040S	050W	4301350687	18517	Indian	Indian	OW	Р
5-6D-45 BTR	6	040S	050W	4301350688	18726	Indian	Indian	OW	P
7-7D-45 BTR	7	040S	050W	4301350689	18380	Indian	Indian	OW	P
14-10D-45 BTR	10	040S	050W	4301350754	18447	Indian	Indian	OW	P
14-9D-45 BTR	9	040S	050W	4301350755	18379	Indian	Indian	OW	P
13-16D-36 BTR	16	030S	060W	4301350757	18206	Indian	State	OW	Р
5-9D-36 BTR	9	030S	060W	4301350843	18381	Indian	Fee	OW	P
16-5D-46 BTR	5	040S	060W	4301350844	18280	Fee	Fee	OW	Р
5-27D-37 BTR	27	030S	070W	4301350847	18526	Indian	Fee	OW	Р
7-4D-45 BTR	4	040S	050W	4301350884	18562	Indian	Indian	OW	Р
2-16D-45 BTR	16	040S	050W	4301350899	18619	Indian	Indian	OW	Р
16-10D-45 BTR	10	040S	050W	4301350902	18725	Indian	Indian	OW	P
5-2D-36 BTR	2	030S	060W	4301350913	18886	Indian	Fee	ow	Р
13H-27-36 BTR	27	030S	060W	4301350918	18445	Indian	State	ow	Р
8-16D-46 BTR	16	040S	060W	4301350953	19027	Indian	Indian	OW	Р
16-16D-46 BTR	16	040S	060W	4301350956	19028	Indian	Indian	OW	Р
16-9D-45 BTR	9	040S	050W	4301350962	18662	Indian	Indian	OW	Р
14-31D-36 BTR	31	030S	060W	4301350973	18524	Indian	Fee	OW	Р
5-10D-36 BTR	10	030S	060W	4301350978	18989	Indian	Fee	OW	Р
1-32D-36 BTR	32	030S	060W	4301350979	18648	Indian	Fee	OW	Р
16-12D-36 BTR	12	030S	060W	4301350980	18748	Indian	Fee	ow	Р
2-18D-45 BTR	18	040S	050W	4301350991	18776	Indian	Indian	OW	Р
3-1-46 BTR	1	040S	060W	4301351017	18777	Indian	Fee	ow	Р
10-5-45 BTR	5	040S	050W	4301351062	18724	Indian	Indian	OW	Р
12-4D-45 BTR	4	040S	050W	4301351063	18813	Indian	Indian	ow	Р
1-10D-45 BTR	10	040S	050W	4301351064	18966	Indian	Indian	ow	Р
16-2D-46 BTR	2	040S	060W	4301351079	18830	Indian	Indian	OW	Р
9H-4-45 BTR	4	040S	050W	4301351092	18814	Indian	Indian	OW	Р
12-17-45 BTR	17	040S	050W	4301351097	18984	Indian	Indian	OW	Р
5-9D-46 BTR	9	040S	060W	4301351109	19313	Indian	Fee	OW	Р
14-9D-36 BTR	9	030S	060W	4301351144	19004	Indian	Fee	OW	Р
5-31D-36 BTR	31	030S	060W	4301351146	18691	Indian	Fee	OW	Р
4-9D-45 BTR	9	040S	050W	4301351157	18883	Indian	Indian	OW	Р
8-12D-46 BTR	12	040S	060W	4301351159	18911	Indian	Indian	OW	Р
LC TRIBAL 16-23D-47	23	040S	070W	4301351180	18617	Indian	Indian	OW	Р
14-7D-45 BTR	7	040S	050W	4301351222	18949	Indian	Indian	OW	Р
5-16D-45 BTR	16	040S	050W	4301351223	18987	Indian	Indian	OW	Р
4-5D-45 BTR	5	040S	050W	4301351242	18882	Indian	Indian	OW	P
LC TRIBAL 16H-19-45	19	0408	050W	4301351278	18627	Indian	Indian	OW	Р
LC TRIBAL 13-19D-45	19	040S	050W	4301351280	18628	Indian	Indian	OW	Р
LC TRIBAL 5-30D-45	30	040S	050W	4301351281	19448	Indian	Indian	OW	Р

LC TRIBAL 15-24D-46	24	040S	060W	4301351283	18626	Indian	Indian	OW	Р
LC TRIBAL 13H-24-46	19	040S	050W	4301351289	18629	Indian	Indian	ow	Р
7-16-47 BTR	16	040S	070W	4301351296	18950	Indian	Fee	ow	P
14-18D-45 BTR	18	040S	050W	4301351313	19005	Indian	Indian	ow	Р
LC TRIBAL 16-30D-46	30	040S	060W	4301351320	19006	Indian	Indian	ow	Р
LC TRIBAL 5-20D-45	20	040S	050W	4301351331	19449	Indian	Indian	ow	Р
11-8D-46 BTR	8	040S	060W	4301351336	19314	Indian	Indian	OW	Р
5-7D-45 BTR	7	040S	050W	4301351350	18951	Indian	Indian	ow	Р
7-5-35 BTR	5	030S	050W	4301351599	19078	Indian	Fee	OW	P
13-5D-35 BTR	5	030S	050W	4301351600	18996	Indian	Fee	ow	Р
11-5D-35 BTR	5	030S	050W	4301351601	19061	Fee	Fee	OW	Р
15-5D-35 BTR	5	030S	050W	4301351602	19062	Fee	Fee	OW	Р
9-5D-35 BTR	5	030S	050W	4301351609	19029	Indian	Fee	ow	Р
3-5D-35 BTR	5	030S	050W	4301351638	19079	Indian	Fee	OW	Р
7-8-46 BTR	8	040S	060W	4301351702	19315	Indian	Indian	ow	Р
7-30-46 DLB	30	040S	060W	4301351703	18997	Fee	Indian	OW	Р
3-13D-46 BTR	13	040S	060W	4301351718	18881	Indian	Indian	ow	Р
2-13D-46 BTR	13	040S	060W	4301351719	18885	Indian	Indian	OW	Р
12-12D-46 BTR	12	040S	060W	4301351720	18867	Indian	Indian	OW	P
10-12D-46 BTR	12	040S	060W	4301351721	18856	Indian	Indian	ow	Р
11-11D-47 BTR	11	040S	070W	4301352091	19633	Fee	Fee	ow	P
7-12D-47 BTR	12	040S	070W	4301352094	19600	Indian	Fee	ow	Р
5-12D-47 BTR	12	040S	070W	4301352095	19634	Indian	Fee	ow	Р
14-33D-35 BTR	33	030S	050W	4301352162	19450	Indian	Fee	ow	Р
16-33D-35 BTR	33	030S	050W	4301352163	19451	Indian	Fee	ow	Р
14-22-46 DLB	22	040S	060W	4301333660	17604	Indian	Indian	D	PA
13H-31-36 BTR	31	0308	060W	4301350465	18485	Indian	Fee	OW	PA
16X-23D-36 BTR	23	030S	060W	4301350623	18007	Indian	State	OW	PA
8-6-45 BTR	6	040S	050W	4301350900	18561	Indian	Indian	ow	PA
13-13-36 BTR	13	030S	060W	4301350919	18364	Indian	Fee	OW	PA
7-28-46 DLB	28	040S	060W	4301333569	16460	Indian	Indian	OW	S
5-21-36 BTR	21	030S	060W	4301333641	16674	Indian	Fee	GW	S
13-26-36 BTR	26	030S	060W	4301333980	17569	Indian	Fee	OW	S
14-1-46 BTR	1	040S	060W	4301334113	18516	Indian	Indian	OW	S
16-21-36 BTR	21	030S	060W	4301334130	17721	Indian	Fee	OW	S
14-21-36 BTR	21	030S	060W	4301334131	18006	Indian	Fee	OW	S
7-16-36 BTR	16	030\$	060W	4301334133	17834	Indian	Fee	OW	s
1-30-36 BTR	30	0308	060W	4301334134	17905	Indian	Fee	OW	S
16-30-36 BTR	30	0308	060W	4301334135	18005	Indian	Fee	OW	S
3-23-36 BTR	23	0308	060W	4301334137	17860	Indian	Fee	OW	S
16-16-36 BTR	16	030S	060W	4301334138	17666	Indian	Fee	OW	S

4-26-36 BTR	26	030S	060W	4301334139	17620	Fee	Fee	OW	S
9-11-36 BTR	11	030S	060W	4301334276	17451	Indian	Fee	OW	S
3-36-36 BTR	36	030S	060W	4301350398	17955	Indian	Fee	OW	S
7-10-36 BTR	10	030S	060W	4301350437	18052	Indian	Fee	OW	S
16-12D-46 BTR	12	040S	060W	4301350467	18051	Indian	Indian	OW	S
13H-13-46 BTR	13	040\$	060W	4301350468	18208	Indian	Indian	OW	S
13-12-46 BTR	12	040S	060W	4301350469	18233	Indian	Indian	OW	S
14-8D-36 BTR	8	030S	060W	4301350612	18163	Indian	Fee	OW	S
14-7D-36 BTR	7	030S	060W	4301350613	18330	Indian	Fee	OW	S
16-9-36 BTR	9	0308	060W	4301350645	18078	Indian	Fee	OW	S
7-27-37 BTR	27	030S	070W	4301350647	18090	Indian	Fee	OW	S
16-12D-37 BTR	12	030S	070W	4301350785	18446	Indian	Fee	OW	S
14-21D-37 BTR	21	030S	070W	4301350859	18548	Indian	Fee	OW	S
10-18D-36 BTR	18	030S	060W	4301350915	18884	Indian	Fee	OW	S
5-27D <b>-</b> 36	27	030S	060W	4301350917	18482	Indian	State	OW	S
10-36D-36 BTR	36	030S	060W	4301351005	18523	Indian	Fee	OW	S
14-6D-45 BTR	6	040S	050W	4301351158	18967	Indian	Indian	OW	S
5H-1-46 BTR UTELAND BUTTE	6	040S	050W	4301351215	18728	Indian	Indian	OW	S
5H-1-46 BTR WASATCH	6	040S	050W	4301351216	18727	Indian	Indian	OW	S
1-25D-36 BTR	25	030S	060W	4301351294	18798	Indian	Fee	OW	S
5-5D-35 BTR	5	030S	050W	4301351605	19055	Indian	Fee	OW	S
16-23-36 BTR	23	030S	060W	4301333971	17182	Indian	Fee	OW	TA
LC TRIBAL 14-23D-47	23	040S	070W	4301334022	18616	Indian	Indian	OW	TA
5-32D-36 BTR	32	030S	060W	4301350756	18328	Indian	Fee	OW	TA



October 20, 2016

RECEIVED

OCT 21 2016

Re: Bill Barrett Corporation Transfer to New Operator

DIV. OF OIL, GAS & MINING

Dear Ms. Medina:

Attached please find the change of operation Form 9, Form 5's and Request to Transfer APD formchanging the operator from Bill Barrett Corporation to RIG II, LLC, effective 11/1/2016. Badlands Energy – Utah, LLC will be a sub-operator.

#### **New Operator Contact information:**

RIG II, LLC 1582 West 2600 South Woods Cross, Utah 84087-0298 Telephone:(801) 683-4245 Fax:(801) 298-9889

Upon reviewing the attached, please contact myself with any questions at 303-312-8115.

Sincerely,

**Bill Barrett Corporation** 

Brady Riley Permit Analyst

#### STATE OF UTAH FORM 9 **DEPARTMENT OF NATURAL RESOURCES** 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING (see attached well list) 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS N/A 7, UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 1. TYPE OF WELL 8. WELL NAME and NUMBER OIL WELL 🔽 GAS WELL (see attached well list) 2. NAME OF OPERATOR: 9. API NUMBER RIG II, LLC 3. ADDRESS OF OPERATOR PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT: 1582 West 2600 South (801) 683-4245 STATE UT ZIP 84087 Wood Cross 4. LOCATION OF WELL FOOTAGES AT SURFACE: (see attached well list) COUNTY: QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: UTAH CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF SUBMISSION TYPE OF ACTION ACIDIZE REPERFORATE CURRENT FORMATION NOTICE OF INTENT (Submit in Duplicate) ALTER CASING FRACTURE TREAT SIDETRACK TO REPAIR WELL Approximate date work will start; CASING REPAIR **NEW CONSTRUCTION** TEMPORARILY ABANDON 11/1/2016 CHANGE TO PREVIOUS PLANS OPERATOR CHANGE TUBING REPAIR CHANGE TUBING PLUG AND ABANDON VENT OR FLARE SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK WATER DISPOSÁL (Submit Original Form Only) CHANGE WELL STATUS PRODUCTION (START/RESUME) WATER SHUT-OFF Date of work completion: COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE OTHER: CONVERT WELL TYPE **RECOMPLETE - DIFFERENT FORMATION** 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. RIG II, LLC IS SUBMITTING THIS SUNDRY AS NOTIFICATION THAT THE WELLS LISTED ON THE ATTACHED LIST HAVE BEEN SOLD TO-Rig II, LLC BY BILL BILL BARRETT CORPORATION EFFECTIVE 11/1/2016. PLEASE REFER ALL FUTURE CORRESPONDENCE TO THE ADDRESS BELOW. RIG II, LLC 1582 West 2600 South Woods Cross, Utah 84087-0298 801-683-4245 (STATE/FEE BOND # 9219529/ BLM BOND # UTB000712/ BIA BOND # LPM9224670) BILL BARRETT CORPORATION NOILS RIG II, LLC MAME (PLEASE PRINT) \_ NAME (PLEASE PRINT) SIGNATURE SIGNATURE EH&S, Government and Regulatory Affairs Jesse McSwain Manager NAME (PLEASE PRINT) 1012016

**APPROVED** 

NOV 0 7 2016

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# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

#### **Request to Transfer Application or Permit to Drill**

	(This form should ac	ccompany a Sundr	y Notice, Form 9, reque	esting APD transfer)		
Well	name:	(See attached li	st)			
API ı	number:					
Loca	ation:	Qtr-Qtr:	Section:	Township: Range:		
Com	pany that filed original application:	Bill Barrett Corp	oration			
Date	original permit was issued:					
Com	pany that permit was issued to:	Bill Barrett Cor	poration			
Check one		Des	ired Action:			
	Transfer pending (unapproved) App					
	The undersigned as owner with legal r submitted in the pending Application for owner of the application accepts and a	or Permit to Dril	l, remains valid ar	nd does not require revision. The	new	
✓	Transfer approved Application for F	ermit to Drill t	o new operator			
	The undersigned as owner with legal r information as submitted in the previous revision.				re	
Folio	owing is a checklist of some items rel	ated to the ap	plication, which s	should be verified.	Yes	No
If loc	ated on private land, has the ownership	changed?			<b>√</b>	
	if so, has the surface agreement been	updated?				✓
	e any wells been drilled in the vicinity of tirements for this location?	the proposed w	rell which would af	fect the spacing or siting		✓
	e there been any unit or other agreemen osed well?	ts put in place t	hat could affect th	e permitting or operation of this		✓
	there been any changes to the access osed location?	route including	ownership or righ	t-of-way, which could affect the		✓
Has t	the approved source of water for drilling	changed?				✓
	e there been any physical changes to the s from what was discussed at the onsite		on or access route	which will require a change in		✓
Is bo	nding still in place, which covers this pro	posed well? B	ond No. 9219529-UDOGM/U	JTB000712-BLM / LPM9224670-BIA	1	
shou nece	desired or necessary changes to either a ld be filed on a Sundry Notice, Form 9, o ssary supporting information as required	or amended Ap	plication for Permi			red,
	e (please print) Jesse McSwain		Title Manager	2110		
_	esenting (company name) RIG II, LLC		Date 10 0	<u> 114 </u>		
rtepi	cooming (company name)			· · · · · · · · · · · · · · · · · · ·		

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

### STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING

•	TRANSFER OF AUTHORITY TO INJECT								
Well Name and Number 6-32-36 BTR SWD		4			API Number 4301350921				
Location of Well				DUQUENOE	Field or Unit Name CEDAR RIM				
Footage: 1628 FNL 1553 FWL  QQ, Section, Township, Range: SENW	32	3S	6W	County : DUCHENSE  State : UTAH	Lease Designation and Number 2OG0005608				

EFFECTIVE DATE OF TRANSFER: 11/1/2016

CURRENT OP	PERATOR	
Company:	BILL BARRETT CORPORATION	Name: Duane Zavadil
Address:	1099 18th Street Ste 2300	Signature: 2nCd
	city DENVER state CO zip 80202	Senior Vice President - Title: EH&S, Government and Regulatory Affairs
Phone:	(303) 293-9100	Date: 10 20 16
Comments	· · · · · · · · · · · · · · · · · · ·	

Address: 1582 West 2600 South Signature: Signature: Manager	Company: RIG II, LLC Name: Jesse McSwain	
10/2 . 111	1593 West 2000 Courts	R:
(004) 002 4045	city Wood Cross state UT zip 84087 Title: Manager	
Phone: (801) 683-4245 Date: 10 LC 10	Phone: (801) 683-4245 Date: 10 20 10	

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Transfer approved by:

Approval Date: ///3//L

Comments:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

	TRANSFER OF AL	JTHORITY TO INJECT	T
Well Name and 16-6D-46 BT			API Number 4301350781
ocation of Well		:	Field or Unit Name
Footage: 03	200 FSL 0099 FEL	County : DUCHESNE	ALTAMONT Lease Designation and Number
QQ, Section,	Township, Range: SESE 6 4S 6W	State: UTAH	20G0005608
	11/1/2016		
EFFECTIVE L	DATE OF TRANSFER: 11/1/2016		
URRENT OP	PERATOR		
Company:	BILL BARRETT CORPORATION	Name: Duane	Zavadil
Address:	1099 18th Street Ste 2300	Signature:	m ZwW
	city DENVER state CO zip 80202	SeniorV	ice President - Government and Regulatory Affairs
Phone:	(303) 293-9100	Date:	20/16
Comments:	:	<del>-                                    </del>	
NEW OPERAT			
Company:	RIG II, LLC	Name: Jesse	McSwain
Address:	1582 West 2600 South	Signature:	Dese MG:
	city Wood Cross state UT zip 84087	Title: Mana	
Phone:	(801) 683-4245	Date:	120/14
Comments	:		
This space for S	state use only)	•	1 ,
Transfer ap	pproved by:	Approval Date:	11/3/16
	Title: VIC		

Comments:

#### STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

TRANSFER OF AUTHORITY TO INJECT	
Well Name and Number SWD 9-36 BTR	API Number 4301350646
Location of Well	Field or Unit Name
Footage: 0539 FSL 0704 FEL	County : DUCHESNE CEDAR RIM  Lease Designation and Number
QQ, Section, Township, Range: SESE 9 3S 6W	State: UTAH 2OG0005608
EFFECTIVE DATE OF TRANSFER: 11/1/2016	
CURRENT OPERATOR	
Company: BILL BARRETT CORPORATION	Name: Duane Zavadil
Address: 1099 18th Street Ste 2300	Signature: James Zawaki
city DENVER state CO zip 80202	Signature:  Senior Vice President -  Title: EH&S, Government and Regulatory Affairs
Phone: (303) 293-9100	Date: 10/7.0/14
Comments:	
NEW OPERATOR	
Company: RIG II, LLC	Name: Jesse McSwain
Address: 1582 West 2600 South	Signature: See WG-
city Wood Cross state UT zip 84087	Title: Manager
Phone: (801) 683-4245	Date: 1076110
Comments:	'
(This space for State use only)	
Transfer approved by:	Approval Date:
Title:	
Comments: This well curs ag	eprived by USERA.
COMMITTEE OF A	will be required.